DIGITAL CITIZENSHIP: ELEMENTARY EDUCATOR PERCEPTIONS AND FORMATION OF INSTRUCTIONAL VALUE AND EFFICACY

A dissertation submitted to the faculty of

Immaculata University

by Ryan P. Berardi

In partial fulfillment of the requirements

for the degree of

Doctor of Education

Immaculata University October 2015

TITLE OF DISSERTATION

Digital Citizenship: Elementary Educator Perceptions and Formation of Instructional Value and Efficacy

AUTHOR: Ryan P. Berardi

Marsha R Burda, Ed. D.
Chairperson

Sharon Walbond Richardson Ed. D.
Committee

Andrew S. Gaytill Ed. D.
Committee

Lindy J Bigos, D.Ed.
Reader

Sister Carol Anne Couchara IHM, Ed. D.
S. Carol Anne Couchara, IHM, Ed. D.
Professor of Education, Dissertation Support Manager

ON BEHALF OF IMMACULATA UNIVERSITY

Thomas F. O'Brien
Thomas F. O'Brien, Ph. D., Ed. D.
Dean, College of Graduate Studies

Melissa Reed
Melissa Reed, Ed. D.
Chair, Education Division

DATE: October 15, 2015

Abstract

This study examined elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship. The study further sought to explore educators' experiences conducive to both positive and negative feelings of value and efficacy related to digital citizenship. Data were collected from 64 elementary teacher participants across five public school districts in South Central Pennsylvania. This multi-site qualitative study incorporated the use of an electronic survey, five open-ended responses, and one-to-one interviews to obtain data regarding perceptions of value and self-efficacy as they related to the instruction of digital citizenship. The findings of this study suggested that while elementary teachers valued the concept of digital citizenship instruction, the majority of professionals desired a clearer vision and mission from their district of employment to enhance their self-efficacy regarding the instruction of digital citizenship. Elementary teachers who expressed the highest levels of self-efficacy related to digital citizenship, as well as executed lessons that matched best practices according to previous literature, were frequently educators who classified themselves as digital immigrants.

Keywords: digital citizenship, digital ethics, teacher efficacy, character education

Acknowledgements

The doctoral dissertation represents a journey of growth and a coveted milestone that possesses personal value of great significance. I wish to express my sincere gratitude to all of those who have supported my efforts in the accomplishment of this study.

First, I give honor to God. I thank Him for providing me the necessary levels of perseverance and wisdom to succeed in my doctoral program, but also for providing me with the opportunity to use the gifts He has bestowed upon me to remind children that they have great worth. I've been blessed with this opportunity as a teacher for nine years, and now as a principal.

Thank you to Dr. Marsha Hurda, committee chairperson, for her strong support academically as well the selfless way she pours her heart into her students.

Thank you to Dr. Sharon Richardson and Dr. Andy Graybill, committee members. They have been pillars of support throughout the dissertation process as well as provided me with various supports during my transition from teacher to principal. Their confidence in my abilities has strengthened my drive to reach higher for my students.

Thank you to my cohort and network of friends at Immaculata University. It has been an honor to work with each of them throughout my program. I am also thankful for the support offered by my second grade colleagues Sue Bauman, Claudia Lints, and Brenda Yoder from Smoketown Elementary. When I think about what it means to embrace the calling of an educator, I frequently envision their dedication.

I am also thankful to Alan Wissinger for inspiring me to provide growth to the hearts and minds of children. Without his natural influence as my 6th grade teacher, I am uncertain that I would have been focused on my place within education so early in my

life. Further am I thankful to Randy McCarty, my former principal and mentor in school administration. His leadership was always driven with a strong concern for the affect of his staff and students, underscoring the importance of this study.

I am also thankful to my administrative colleagues within Warwick School District, Melanie Calender, Jen Murphy, Stacie Bardell, and Lisa Himes. They have provided me with support on numerous occasions throughout the dissertation process.

Thank you to my parents, Michele and Randal Berardi. Their belief in my professional and personal aspirations has been limitless throughout this process. They have provided me with an unwavering example of the importance of leading a life of integrity and selflessness. Additionally, I am grateful for the support provided by my mother-in-law and father-in-law, Pat and Mike Turi. They have gone out of their way on a regular basis to support me throughout this process, selflessly meeting the needs of my family.

Most importantly, thank you to my daughter, Cella and my wife, Melissa. They have loved me throughout my professional pursuits despite each new program taking more of my time away from them. While the journey possessed its waves along the way, I wouldn't want to weather the storm with anyone else. I love both of you and look forward to what the future holds.

Table of Contents

List of Tables

Chapter One – Introduction

Overview

The use of technology in professional and student educational pursuits has become a ubiquitous experience (Biladeau, 2009; Hammonds, Matherson, Wilson, & Wright, 2013). While repeated use of a tool may lead to a decreased sense of novelty, student use of technology seems to be growing at exponential rates. Orth and Chen (2013) validated this statement as they shared, "Our nation's children spend more time with media and digital activities than they do with their families or in school, which profoundly impacts their social, emotional, and physical development" (p. 58). Feedback from digital behavior "has become the 'other parent'…powerfully affecting [students'] mental, physical, and social development" (Orth & Chen, 2013, p. 59). As with any repeated exposure, the use of technology has the potential to exhibit a level of influence on student development (Bouhnik, 2013). Technology, specifically the use of social media, has become a part of a daily routine for many adolescents as many school age children spend approximately 27 minutes a day on Facebook, and send an average of 2,000 text messages per month (Hollandsworth, Dowdy, & Donovan, 2011; Reid & Boyer, 2013). For many adolescents, the digital partition of their lives has formulated norms with very little input from the parents and teachers charged to guide students through development (Bouhnik, 2013).

Digital tools and resources housed within the Internet have become the foundation, rather than an option, for students who are problem solving, exploring, and working (Kolikant, 2010). Kirschner and Karpinski (2010) joined a number of other authors in calling this generation of students "digital natives." While students identifying with this

group have been frequently referenced in literature as having enhanced abilities to use digital tools within the Internet, researchers have realized that this definition has not looked beyond usage observations (Kirschner & Karprinski, 2010; Kolikant, 2010). Kolikant (2010) explained:

> The definition of 'digital native' should not focus solely on technical skills and usage. Rather, it should be noted that this generation was born to a different world, a world immersed with digitalism, in which the rules of the game have changed. (p. 1390)

These changes have minimized the influence of a student's physical location having an impact on the ability to access researched statements, unsupported opinions, and contribute to conversations on a particular subject (Biladeau, 2009). Vandoninck, d'Haenens, De Cock, and Donoso (2011) noted that increased technology access is available to students, regardless of supervision, bringing about risks of content, contact, and conduct. Recent literature has demonstrated that digital natives are very comfortable using digital tools without understanding the complexities and risks that are associated with their use (James et al., 2010; Kirschner & Karpinski, 2010).

Increased reports of cyberbullying are a byproduct of the ease of digital communication tools provided for use prior to students' emotional maturity. Some studies have reported that up to one third of a school's student body experiences cyberbullying, while many studies indicate that it occurs more frequently than parents and educational professionals are aware (Marées & Petermann, 2012; Tangen & Campbell, 2010; Wong-Lo, Bullock, & Gable, 2011). Wong-Lo et al. (2011) clarified that access to the Internet is less of a problem than the absence of student empathy and

understanding, for victims of bullying who endure intensified effects of digital harm due to large audiences and longevity on social media. Cyberbullying can take many forms, but is defined broadly as intentional, repeated, and aggressive behavior through the use of digital communication (Marées et al., 2012). It has become increasingly attractive to individuals with characteristics not typically associated with face to face bullying, as the aggressor rarely is within physical proximity of the victim, where feelings of remorse might be experienced (Marées et al., 2012; Patchin & Hinduja, 2010). Schools have typically responded with some proactive, but primarily reactive measures. Tangen and Campbell (2010) reported that after a year of weekly student dialogues regarding the dangers of cyberbullying there was not a sustained reduction in the behavior when compared to one group not receiving the treatment. With the little research available that has shown success in reducing cyberbullying, literature has indicated that students' perceptions of their schools' ineffectiveness to reduce cyberbullying is in agreement with the feeling of helplessness teachers report (Marées et al., 2012; Wong et al., 2011).

Although cyberbullying and the school's role in dealing with it have only emerged in educational literature within the last decade, schools have had a part in developing student behavior based upon community norms since the early 1800s (Brimi, 2008). Through the vehicle of character education, school systems have attempted to reduce harmful behavior through discussion of moral knowing, identification of moral feelings, and the selection of moral behavior (Howard, Berkowitz, & Schaeffer, 2004). Students, however, frequently perceive such conversations as contrived and not important unless a tragedy has occurred that has affected them personally (Brimi, 2008). Further, an audience that appears agreeable to the message of desirable physical and digital

behavior may not equate to success. Students who respect those providing the knowledge, without experiencing or questioning, are creating a barrier to critical thinking and the development of dispositions that may act as an internal censor (Feng & Newton, 2012). Multiple studies have shown that students demonstrate sustained behavioral changes when they are provided with opportunities to examine their moral reasoning through engaging in settings and situations that provide authentic characteristics (English, 2011; Howard et al., 2004). The perceptions of teachers and students are that schools are not typically prepared to create such an environment (Tangen & Campbell, 2010).

In an effort to authentically engage students through digital vehicles, and in an effort to enhance learning, some schools have begun to help students prepare to be productive, safe, and constructive digital citizens (Tan, 2011). Many digital natives, adults and students, consider themselves identifiable and contributing members of both physical and digital realms where events occurring in one realm transfer to actions and emotions within the other (Belk, 2013). The Internet is now seen as less of a tool and more as an extension of human life (Chiang & Lee, 2011). To date, however, many schools are ignoring the importance of this part of their students' lives, identifying it as being outside of their realm of authority (Orth & Chen, 2013). Reciprocally, schools that have shifted efforts away from technical computer usage and into learning environments that naturally incorporate the tenets of digital citizenship are often finding success in building healthy physical and digital cultures (Shipley, 2011). Individuals working in such settings espouse beliefs that move beyond digital etiquette and build opportunities to intrinsically motivate students through the products of their digital efforts.

Educators who successfully motivate students to embrace digital citizenship do so because they equally value the concept and believe they have the ability to enlighten their students to also value digital citizenship (Liu, 2011; Sadaf, Newby, & Ertmer, 2012). It seems it is not enough, however, to only have efficacy in isolated educators. The attitudes and beliefs of other educators regarding teachers who embrace the instruction of digital citizenship was the most impactful variable on student measures of success in relation to desirable digital behaviors (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012). As teachers stand unified in their high value of digital citizenship and efficacy to affect student outcomes, research has indicated that student motivation is positively correlated (Klassen & Chiu, 2010). Not all educators, present and pre-service, believe they have the time and/or ability to construct environments conducive to digital citizenship with other professional demands that are already present (Sadaf et al., 2012). A view of digital behavior in its present state, however, indicates that if schools choose to remain inactive, digital culture will continue to establish its own norms without the guidance of the school systems created to guide the development of its citizens (Hollandsworth, Dowdy, & Donovan, 2011).

Need for the Study

Recent research has indicated that students live their lives in physical and digital realms, each with bi-directional influence upon the other (Bounik & Deshen, 2013; Ohler, 2012; Orth & Chen, 2013). Social media has had a particularly strong influence on student self-worth and feedback on novel behavior (Orth et al., 2013). Orth and Chen (2013) shared teacher perceptual feedback indicating that educators are unsure of how to assist and protect students in digital environments beyond attempting to restrict access,

and question whether it is even within the realm of a school's responsibility. Left without adult influence, however, students are frequently subjected to digital slander through cyberbullying, feel justified in downloading files illegally, and feel little to no remorse as long as they are operating under the perceived digital norms created by that group (Orth & Chen, 2013; Reid & Boyer, 2013; Ribble, 2014; Tangen & Campbell, 2010).

In order for schools to build a digital sense of civic responsibility, environments must be created that allow students to authentically practice the desirable behavior (Tan, 2011). Serriere (2013) clarified that these lessons must not look or feel like separate entities, but rather as a core lens through which responsible individuals operate. It is under these circumstances that students have demonstrated a feeling of digital citizenship, and have used digital tools, in respectful, safe, and productive manners with regard to self and others (Reid & Boyer, 2013; Ribble, 2014). Research has indicated that this outcome, like any pedagogical framework, will likely result in student success if educators find it personally valuable and feel efficacy regarding its execution (Liu, 2010; Sadaf, Newby, & Ertmer, 2012)

While it is not uncommon to find studies focused on general teacher efficacy, perceived ability regarding technology integration, or the value of technology integration, educational literature is largely absent of studies focusing on the educators' perceptions on the value and efficacy of teaching students digital citizenship (Bowen, 2013). The result may be schools committing time and effort to technological experiences that have the potential to yield the desired outcome, yet failing to have students embrace digital citizenship because teachers either feel that it is unimportant or unable to be taught. Even if such environments are mandated, teachers with low instructional efficacy are quicker

to give up on slower learners, focus on the presence of mistakes, and pay little attention to motivating variables (Adalsteinsson, Frimannsdottir, & Konradsson, 2014). Further research is needed regarding teacher perceptions of the personal value and efficacy regarding the instruction of digital citizenship to students. The outcomes of such research will inform school leaders, educators, and outside stakeholders of their readiness to move forward with instruction in digital citizenship. Of equal importance to educational stakeholders is the identification of variables that have led to positive or negative perceptions of personal value and efficacy in regard to teaching students digital citizenship.

Statement of the Problem

Students' lives and learning environments are affected by experiences within physical and digital realms (Bounik & Deshen, 2013; Ohler, 2012; Orth & Chen, 2013). Although schools have long worked to influence student dispositions in their physical interactions, harmful and careless behavior, such as cyberbullying, has motivated stakeholders to look for new proactive measures (Brimi, 2008; Tangen & Campbell, 2010). Literature focused on digital behavior has recommended the expansion of character education to include digital citizenship as a behavioral lens as early as kindergarten (Ribble, 2014). "Many new programs that address digital citizenship are designed for students of middle school age or older. Research shows, however, that many students have already derived their own rules for use of technology by this age" (Hollandsworth, Dowdy, & Donovan, 2011, p. 40). This shift will only result in student success if educators view digital citizenship as personally valuable and feel confident in executing instruction on the topic (Sadaf, Newby, & Ertmer, 2012).

These concepts have led to the statement of the problem: the ability for students to embrace digital citizenship is strongly influenced by teacher perceptions of the value and efficacy regarding the former, yet little research has been conducted to examine these perceptions. The purpose of this multi-site qualitative research study was to explore elementary teachers' perceptions of value and efficacy regarding their instruction of digital citizenship. This study also sought to explore educator experiences conducive to both positive and negative feelings of value and efficacy related to digital citizenship.

Definition of Terms

For the purpose of this study, the following definitions apply:

Character Education – A field that focuses on the moral development of individuals. It is often taught to be generalized into all areas of life with a focus on moral knowing, moral feeling, and moral action (Howard, Berkowitz, & Schaeffer, 2004).

Cyberbullying – "An intentional, repeated, and aggressive act or [behavior] carried out by a group of individuals [or individual] employing information and communication technology (ICT) as an instrument" (Marées & Petermann, 2012, p. 468).

Digital Citizenship - The use of digital tools in respectful, safe, and productive manners with regard to self and others (Reid & Boyer, 2013; Ribble, 2014)

Digital Native – The label given to a person born during a time period of immersion in technology as a means of problem solving, exploring, and living the routine and novel aspects of his or her life (Kolikant, 2010).

Digital Tools – The name given to "a wide array of web-based applications which allow users to collaboratively build content and communicate with others across the world" (Sadaf, Newby, & Ertmer, 2012, p. 937).

Elementary Teacher – The term (for the purposes of this study) given to a graded teacher, specialist (speech, ESL, etc.), or enrichment teacher (music, art, etc.) who is responsible for instructing students as young as kindergarten and as old as sixth grade. (Parker, 2001).

Self-Efficacy – A term used to describe one's personal belief that he or she has the ability to accomplish an identified goal or objective. Self-efficacy is influenced by past experiences of success, watching others succeed, the encouragement provided by others, and one's physical and emotional well-being (Adalsteinsson, Frimannsdottir, & Konradsson, 2014).

Web 2.0 – As the original Web (Web 1.0) was used for information consumption, Web 2.0 is built as digital tools for creation. "Some of the most commonly used Web 2.0 technologies include blogs, wikis, social bookmarking, and social network sites" (Sadaf, Newby, & Ertmer, 2012, p. 937).

Limitations

There were several limitations to this study. The study included five school districts, identified as suburban or rural, within the South Central region of Pennsylvania. There were not any urban districts included in this study, and for this reason, results may not be accurately generalized to urban settings. Secondly, technological tools available at schools of students within each school district varied based upon the particular demographics of the area. Teacher perceptions of value and efficacy regarding the instruction of digital citizenship to students may have been affected by equipment available to educators in their instructional environment. Finally, the state of Pennsylvania had recently added new Student Learning Objective (SLO) accountability

measures to the workload of each teacher. The time teachers spent on answering survey and interview questions, or whether they participated at all, depended upon the value they placed on contributing to a doctoral study juxtaposed against other professional obligations. This study was also based on teacher perceptions, which varied, as they were uniquely created by past experiences.

Research Questions

The purpose of this multi-site qualitative research study was to explore elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship. This study further sought to explore educators' experiences conducive to both positive and negative feelings of value and efficacy related to digital citizenship.

1. What are the perceptions of elementary teachers regarding the value of instructing digital citizenship to students?
2. What are the perceptions of elementary teachers regarding their efficacy in instructing digital citizenship to students?
3. What prior experiences do elementary teachers credit to forming their perceptions regarding the value and efficacy of teaching digital citizenship to students?

Summary

In order for schools to educate students holistically, they must address the fact that learners are influenced in both digital and physical realms (Bounik & Deshen, 2013; Ohler, 2012; Orth & Chen, 2013). Although digital natives show little hesitation in using powerful digital tools, there have been a variety of studied occurrences demonstrating that students are either unaware or do not empathize with the negative effects that can result from irresponsible use (Brimi, 2008; Kolikant, 2010). Educators have realized that

previously used methods of character education have not had enough of an influence to reduce physically and emotionally harmful outcomes, such as cyberbullying (Tangen & Campbell, 2010). Schools that have employed opportunities for students to become digital citizens have found that their learners are more likely to make safe, productive, and responsible choices when using digital tools (Shipley, 2011).

Teacher efficacy and perceptions of content value have a strong influence on student learning (Liu, 2011; Sadaf, Newby, & Ertmer, 2012). While studies about teacher perception of technology integration are common, studies focusing on perceptions of teacher value and efficacy of teaching digital citizenship to students are extremely limited (Bowen, 2013). If teachers place low value on digital citizenship and believe they do not have the ability to set up learning environments conducive to student growth, the potential for success may be hindered (Adalsteinsson, Frimannsdottir, & Konradsson, 2014). Understanding teachers' present belief systems may identify preliminary needs prior to setting up environments focusing on digital citizenship.

The purpose of this multi-site qualitative research study was to explore elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship. This study further sought to explore educators' experiences conducive to both positive and negative feelings of value and efficacy related to digital citizenship. Findings from this study may assist school districts in their efforts of preparing students to navigate the digital aspects of their lives. Chapter Two will provide a review of the history of digital citizenship and related literature.

Chapter Two – Literature Review

Introduction

Researchers have frequently shared that technology provides an illusion of complete control (Orth & Chen, 2013). Orth and Chen (2013) explained:

> Our children know more than we think they know and less than they think they know. They are swimming in oceans of data, communication, and media…in truth our children are in danger of being overwhelmed by this 24/7 unfiltered digital world without our guidance. (p. 56)

Elementary students, who are continually developing perceptions of themselves from their environments, are now being shaped by monitored student behavior in the physical world, as well as behavior that may have less guidance in the digital realm (Hollandsworth, Dowdy, & Donovan, 2011). Presently, student growth in technology access and usage is outpacing the preparedness for digital guidance as shared by educators (Tangen & Campbell, 2010). It is inaccurate, however, to associate the increase of online usage with purely undesirable results. While some individuals have chosen to cause destruction with increased technological power, others use the same tools for legal, philanthropic, and academically enriching outcomes (Tan, 2011). Individuals that have decided to use their online presence in safe, responsible, and respectful manners have embraced membership as digital citizens (O'Brien, 2010). This multi-site qualitative research study was designed to explore elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship. This review of literature explores the topics of digital natives, cyberbullying, character education, the foundations of digital citizenship, and teacher efficacy.

Digital Natives

"Technology is as familiar as a knife and fork," to most students learning in today's public schools (Williams, Crittenden, Keo, & McCarty, 2012, p. 128). Despite possessing proficient skills regarding productivity, Salajan, Schonwetter, and Cleghorn (2010) noted that student technology users are often unaware of the potential power they are wielding. The lasting outcomes of digital behavior frequently originate within social media, which has become an almost universal communication vehicle (Joiner et al., 2013). Recent literature has noted that teachers play a critical role as students extend themselves digitally during periods associated with exploration and instability (Myers & Thornham, 2012; Thompson, 2013).

Characteristics of digital natives. While past generations have defined themselves by the birth of family members, Gardner and Davis (2013) noted that self-definitions have shifted to achievements (The Greatest Generation) and finally to an association with technology. This has been illustrated whenever literature refers to Mark Prensky's term, the digital native (Joiner et al., 2013; Salajan, Schonwetter, & Cleghorn, 2010; Thompson, 2013). Prensky's idea of digital natives is defined as individuals who have grown up using computer based technology throughout their lives, and whose cognitive processes have adapted based upon the ability to use digital tools (Bittman, Rutherford, Brown, & Unsworth, 2011). Although this classification is widely accepted for those born after 1980, the term "Google Generation" has recently emerged to define those born after 1993, who frequently use Web 2.0 technology (Joiner et al., 2013, p. 550).

As digital citizens use electronic tools, especially the Internet, as a natural extension of themselves, educational stakeholders have made assumptions of their students' technological proficiency and academic productivity (Kirschner & Karpinski, 2010). Literature has named student multitasking as one common characteristic erroneously attributed to this group due to their frequent interaction with digital tools. In a longitudinal study of over 5,000 children ranging from birth to age eight, Bittman, Rutherford, Brown, and Unsworth (2011) cautioned that this misguided belief has led some students to encounter learning that required multitasking, which resulted in cognitive overload, as well as missed opportunities to understand overarching academic concepts. Some studies have gone as far as to dismiss the classification of digital citizen as possessing any true distinguishing characteristics (Bittman et al., 2011; Kirschner et al., 2010; Salajan, Schonwetter, & Cleghorn, 2010). Regardless of the presence of the label digital citizen, or lack thereof, recent literature has agreed that children presently using technology understand that a search result can be quickly achieved, digital tools can be used to communicate to large audiences with ease, and that the Internet is a preferred point of origin for most tasks (Atif, 2013; Biladeau, 2009).

Digital behavior. Among the variety of tasks for which digital tools have been used within student populations, participation in social networking sites (SNS) has been identified as most common (Kirschner & Karpinski, 2010). Biladeau (2009) noted the convenience of widespread interaction of social media as being attractive for students of all ages. Thompson's (2013) study of 388 college freshman revealed that the majority of digital natives indicated that contributing within a digital realm was as a frequently used behavior, due to the anticipation of prompt feedback from a large number of users

(Thompson, 2013). Myers and Thornham (2012) further detailed that social media has increased in popularity due to a user's ability to control an identity of choice, fact or fiction, to display to an audience.

As students communicate through the use of social media, interactions frequently expand from friends met at school to strangers met within the controlled network (Vandoninck, d'Haenens, De Cock, & Donoso, 2012). While users of social media frequently share that they are aware of online dangers and claim they value privacy, their actions do not always match their stated views (Gardner & Davis, 2013). In a qualitative study of 815 adolescents, participants eluded that this may be due to a misunderstanding of privacy settings, lack of knowledge regarding how to use the aforementioned, or a perceived sense of safety due to dangers being present digitally yet not physically (Vandoninck et al., 2011). The researchers continued on to caution that an inflated sense of safety paired with use of social networking away from parents, presented increased risks. "A bad parental relationship makes [students] get more involved in SNS…As the relationship deteriorates, self-development becomes a more important motive for signing up" (Vandoninck et al., 2011, p. 78).

Adult support. The vast majority of studies are in agreement that adult influence, whether in the form of observation and/or co-usage, has positive influence that often overpowers the potential dangers housed within technology use (Bittman, Rutherford, Brown, & Unsworth, 2011; Thompson, 2013). Such involvement provides protection in the digital realm, as well as the physical realm, when technology is involved (Myers & Thornham, 2012). The novel experiences of a student's early employment and driver awareness are now frequently involving a technological component where adult

interaction may have an influence. In a study that involved a sample of 219 young adults driving while talking on a cellphone, Kirschner and Karpinski (2010) reported that reaction time was similar to a person operating a vehicle while intoxicated. Further, companies have been observed exploiting student employees' social networks as a condition of employment. "Several students referenced friends who made Facebook postings/endorsements about a product where it was part of the summer job responsibility to generate awareness/buzz via social media" (Williams, Crittenden, Keo, & McCarty, 2012, p. 132).

As students gain an understanding for the power associated with using digital tools, purposeful adult interaction has been noted as crucial in helping students decide if performing a digital behavior is appropriate based upon the influence it will have on one's self, the connected individuals and environments (Waycott, Bennett, Kennedy, Delgarno, & Gray, 2010). Kirschner and Karpinski (2010) stated this observation directly by sharing, "The fact that children nowadays make use of many electronic devices and are called digital natives does not make them good users of the media that they have at their disposal" (p. 1238). In fact, increased technology use without effective training in efficiency and planning may lead to increased disruption and reduced productivity (Thompson, 2013; Waycott et al., 2010). Thus, it would seem that teachers and parents are charged with providing cognitive strategies to distinguish the fact from the factoid, and develop students' desires to find truth over convenience (Varela-Candmio, Novo-Corti, Barreiro-Gen, 2014).

Cyberbullying

Studies have described bullying as a complex and multifaceted phenomenon (Sakellariou, Carroll, & Houghton, 2012; Tangen & Campbell, 2010). Interest from researchers surged from the 1980s to 1990s in an effort to curtail a growing number of suicides linked to the results of bullying (Atik & Guneri, 2013). With technological communication now at a ubiquitous state, cyberbullying has emerged as a new vehicle of emotional battery (Patchin & Hinduja, 2010). This method of bullying has inflicted equal or greater pain to its victims, yet it is has only recently gained the attention provided to traditional bullying (Cassidy, Brown, & Jackson, 2012; Tangen et al., 2010). Literature has noted that cyberbullying methods may vary by gender, possess a level of complexity that puzzles adults, and seems to intensify as students grow in age as well as in technological competence (Monks, Robinson, & Worlidge, 2012; Paul, Smith, & Blumberg, 2012).

Cyberbullying characteristics. Cyberbullying is defined as the intentional use of digital communication to cause harm repeatedly to an individual that is perceived to have less social or physical power (Tangen & Campbell, 2010). Campbell, Slee, Spears, Butler, and Kift (2013) espoused that the most harmful and contrasting feature to physical bullying is the ability to inflict pain without the boundaries of time. Bauman (2010) distinguished it further with characteristics such as "(a) the perception of anonymity on the part of the perpetrators; (b) a potentially infinite audience; (c) an inability of the perpetrator to observe the target's immediate reaction; [and] (d) an altered balance of power…" (p. 805). While perpetrators have claimed that some acts of cyberbullying were intended as jokes, others have used digital communication with the intention to

harass, stalk, or threaten (Conn, 2010). Regardless of the form cyberbullying has taken, its effects have been felt by victims in both home and school environments (Campbell et al., 2013; Conn, 2010).

Schools have attempted to proactively guard students against cyberbullying since approximately 1/3 of all children have either been a victim or perpetrator (Marées & Peterman, 2012). The researchers went on to caution that adequate preparation must be situation specific, including the following scenarios:

> [Variations such as] During *impersonation*, another's identity is used to send or post material of insulting, inappropriate, or embarrassing content in order to damage the reputation or the friendships of the target…*Outing* is forwarding or publically posting personal information or images of someone else, especially such material containing private, potentially embarrassing information…*Exclusion* occurs when someone is intentionally left out or barred from an online group or community. (Marées & Peterman, 2012, p. 469)

In addition to the victim's immediate shock to any of the previously stated variations, he or she must then live with harmful effects, of unknown length, that may be enhanced by emails, text messages, and social media (Beran, Rinaldi, Bickham, & Rich, 2012).

Researchers have noted that cyberbullying, like physical bullying, is a group phenomenon that involves others in addition to the bully and victim (Jalon & Arias, 2013; Paul, Smith, & Blumberg, 2012). Paul et al. (2012) illustrated that when a community of students has a reduced tolerance for bullying, it has occurred less frequently. In a study of 220 students aged 7 – 11, 72% of students owned an Internet

ready phone which led Monks, Robinson, and Worlidge (2012) to recommend intervention with students during their elementary years.

Gender and influence. Literature has reported conflicting results regarding whether males or females are more likely to use cyberbullying (Conn, 2010; Topcu & Erdur-Baker, 2012). There has been more agreement, however, regarding strategies used by each gender. Bauman's (2011) study of 221 students, within an intermediate school of grade five through grade eight, indicated that females prefer to use tools that offer instant dialogue while males are more likely to make a threat or defamation using a website or mockery page. Kowalski, Morgan, and Limber (2012) have additionally found that, while male cyberbullying was initiated and continued online, female cyberbullying frequently started as bullying in a physical environment and moved into the digital realm.

"Not surprisingly, associations between peer victimization and children's maladjustment are well-documented" (Flanagan et al., 2013, p. 692). Both males and females that have become victims of cyberbullying have increased anxiety about the ongoing attacks and have less cognition to devote to the learning at hand (Eden, Heiman, & Olenik-Shemesh, 2013). Multiple studies have reported that prolonged cyberbullying drove some victims of both genders to plan physical retaliation through the use of weapons (Bauman, 2011; Patchin & Hinduja, 2010). These consequences are not unknown to students. Flanagan et al. (2013) demonstrated that 78% of youth explained that it was important to tell an adult if a student was being bullied in any way. Despite this statistic, a population of 30 students with a similar understanding of the potential harm of online behavior agreed that by voting on a survey describing a person as having

an undesirable physical appearance was not cyberbullying unless they had been the authors (Paul, Smith, & Blumberg, 2012).

Prevention and support. Despite the complexity of cyberbullying, multiple studies have demonstrated that schools have found creative ways to initiate proactive measures and respond effectively to unforeseeable events (Cassidy, Brown, & Jackson, 2012; Tangen & Campbell, 2010). Successful schools have shared the common belief that cyberbullying should be addressed, regardless of the incident location, as school climate will always be affected (Patchin and Hinduja, 2010). Additional variables to success included addressing physical bullying and cyberbullying in an integrated manner, and the institution of training programs which created common knowledge of interaction within the digital realm (Kowalski, Morgan, & Limber, 2012; Tangen & Campbell, 2010). Other studies demonstrated site-specific success with the use of student created and delivered lessons, as well as digital environments that allowed for cyberbullying role-play to occur (Cassidy, Brown, & Jackson, 2012; Sapouna et al., 2010). It is imperative, however, "that anti-cyberbullying work begin when children are in primary school with the aim to educate them (as well as their teachers and parents) about how to use these forms of communication appropriately" (Monks, Robinson, & Worlidge, 2012, p. 488).

Character Education

Although practices to ensure a safe digital realm have emerged within recent years, efforts to create a physical environment that promotes safety and growth have long been in existence in the form of character education (Snyder, Vuchinich, Acock, Washburn, & Flay, 2012). The affective development of students, sometimes known as moral education or citizenship education, has been summarized as the knowledge, skills,

and dispositions needed to provide care to one's self and others (Howard, Berkowitz, & Schaeffer, 2004). An examination of the available character education literature regarding history, the necessity of focusing on education's affective elements, present outcomes, and documentation of best practices has indicated that students and teachers must be active participants in moral development in order to utilize such practices effectively (Howard et al., 2004; Liddell, 2012).

History of character education. Brimi (2008) indicated that the history of character education is frequently traced back to the early 1800s when acting morally meant outwardly displaying obedience. Arbour, Signal, & Taylor (2009) expanded upon character education lessons within this time period by adding that children were expected to interact with their classmates and animals in a humane manner. To ensure such qualities were instilled in pupils of that time, teacher preparation programs were designed to train educators to gauge high quality character, have a desire to see students succeed, and be able to act morally (Beachum, McCray, Yawn, & Obiakor, 2013). As an increasing number of immigrants arrived to America, the country's schools began to focus on value-based education that promoted hard work and other traits useful for factory workers (Brimi, 2009).

As the nation moved into the mid 1900s, new ideas about the focus of character education began to emerge (Beachu, McCary, Yawn, & Obiakor, 2013). The Values Clarification Movement became a popular method that allowed students to behave as they saw fit, with little teacher influence (Brimi, 2008). By the 1980s, the pendulum had swung back to moving students toward pre-established values, such as refusing drugs and abstaining from premarital sex. As America moved into the 1990s, character education

required students to be aware of societal beliefs, but to also focus on moral knowing, feeling, and acting in an effort to build student autonomy (Brimi, 2008).

While character education is a commonly known phrase in classrooms throughout the nation, it is often described as not being explicitly defined in terms of expected outcomes that are measurable (LePage et al., 2010). Arthur (2011) and Roberts (2010) have concluded that while isolated studies have been conducted in an effort to synthesize important findings, there is much to be done to create widespread understanding of best practices and desired outcomes. Finally, multiple studies agree that in order for character education to enhance school climates in an authentic manner, it must be a core component of preservice teacher programs (Beachum, McCray, Yawn, & Obiakor, 2013; Sanger & Osguthorp, 2012; Temli, Sen, Akar, 2011).

Necessity in schools. Students are afforded the opportunity to interact with individuals, situations, and tools with increasing accessibility and diversity (Lake, 2011). Within these experiences are influences of greed, dishonesty, school violence, drug abuse, and suicide often showcased by the media (Beachum, McCray, Yawn, & Obiakor, 2013; Lake, 2011). If schools desire to have guidance in how students interact with the aforementioned, character education must begin early as "many theorists of developmental psychology have emphasized that students develop codes of moral values in school years…" (Cubukcu, 2012, p. 1527).

With purposeful adult interaction regarding moral development, evidence has suggested that teachers have the ability to successfully help students navigate complex moral issues (Arthur, 2011). In a study of 70 classrooms, with approximately 25 students in each room, Marquez et al. (2014) asserted that such instruction is necessary in order

for students to reduce emotional barriers that presently hinder the impact of academic instruction in many classrooms. Multiple studies have suggested that, beyond empirical evidence, many educators believe guiding students to be autonomous in moral decision-making is a responsibility of their role (Arneback, 2014; English, 2011). Arthur's (2011) study of over 5,000 students ranging from ages 10 – 19 indicated that stronger student-teacher relationships, a byproduct of ongoing character education, may additionally have an impact on enhancing students' attendance and behavior conducive for students to meet learning goals.

Present practice. Although character education programs tend to be tailored to the unique needs of each community, most fall under the categories of focusing on judgment and habit, seeking fundamental values, or a combination of the two (Cubukcu, 2012). Arbour, Signal, & Taylor (2009) reported that the outcomes of many programs frequently displayed an increase in empathetic attitudes, yet typically did not increase empathetic behaviors. Such outcomes have led educators to undermine long-term success by focusing on lessons that have less to do with student discovery and decision-making, and are more focused on generic problem and solution sessions that require little student internalization (English, 2011; Thompson, 2011). Final programmatic decisions vary greatly within the United States, as well as within each state, as America has had very little character education accountability compared to other countries (Brimi, 2008).

English (2011) argued that listening to the feedback of individual learners during character education is of greater importance than the moral-guiding program itself. The researcher stated:

> Specifically, listening critically is oriented toward understanding the learner in three respects: listening to know where the learner is; listening to know in which direction to expand the learner's thought; and listening to know when to end the task of moral guidance. (English, 2011, p. 180)

Such listening practices are rarely practical when the only moral guidance used in a school includes school-wide assemblies with predetermined outcomes (Arneback, 2014). Further, measuring the success attributed to individual students is equally challenging when employing such events (Brimi, 2008; English, 2011).

In contrast to the weak influence of large-scale assemblies, multiple studies have shown that students have reflected on behavior with greater ease when educators adjusted character education delivery to provide students with a sense of efficacy and control (Lake, 2011; Thornberg, 2009). Cubukcu's (2012) study of 40 students between the ages of 12 to 14, presented findings with similar positive outcomes when character education efforts were authentically woven into lessons and naturally occurring experiences, as opposed to stand-alone programs. Multiple studies demonstrated that pairing purposeful role modeling and personal stories, with any character education effort, increased the likelihood of achieving a morally focused outcome (Arthur, 2011; Beachum, McCray, Yawn, & Obiakor, 2013; Osguthorpe, 2009). Arthur (2011) shared that an exception existed, however, if students felt their teachers did not live up to their expectations regarding alignment of experiences or values.

Moving toward best practices. The available literature is in agreement that successful character education allows students to experience the world with opportunities for discussion and exploration before, during, and after each experience (Arneback, 2014;

Liddell, 2012; Marquez et al., 2014). When deciding how to guide student experiences, Howard, Berkowitz, and Schaeffer (2004) clarified that educators must consider the context of their students' environment as well as the needs expressed by student personalities. Further, if a particular perspective is desired, repeated opportunity for exposure has demonstrated a greater likelihood of success when compared against indoctrination and forced decisions (Lake, 2011; Thompson, 2011).

Studies focused on character education have demonstrated that actions on the part of various adult stakeholders are of great importance. Teachers that took the time to openly reflect alongside of students, during the lessons, reported an increased likelihood of responding effectively in conflict driven situations due to their active participation in the character educations program (Schussler & Knarr, 2013; Willems, Denessen, Hermans, & Vermeer, 2012). Further, efforts that occurred in the classroom had an impact of greater longevity when parents, non-classroom professionals, and school leaders provided additional support (Beachum, McCray, Yawn, & Obiakor, 2013; Hudd, Apgar, Bronson, & Lee, 2009; Lake, 2011).

Digital Citizenship

"Some are tempted to think of life in cyberspace as insignificant, as an escape or meaningless diversion. It is not. Our experiences there are serious play. We belittle them at our risk" (James et al., 2010, p. 269). Effective citizenship has been described as a changing set of values and attitudes that evolve with the needs of young citizens, which now almost always includes digital components (Bennett, Wells, & Rank, 2009). While the study of computer ethics has continued to grow since its inception in the 1940s, it has not kept pace with the increased dependency society continues to place on the Internet to

communicate and live productively (Lau & Yuen, 2014). Despite the ubiquitous presence of digital tools used by modern students, digital citizenship has only recently been given attention (Larson, Miller, & Ribble, 2010; Lau & Yuen, 2013). While research into the field has begun to increase, scholars still view the actual instruction of digital citizenship as lacking in instructional time. In a study of over 1,500 surveyed high school students, Greenhow and Robelia (2009) reported that approximately 49% of full-time students had never been provided with formal instruction regarding the operation, or ethics, of Internet use. Urgency has increased as a result of both published tragedies and increased knowledge of the power wielded by using digital communication tools (Langett, 2013). The result has been a decree from the educational community to enhance the importance of digital citizenship through experiences of creating awareness, providing guided experiences, modeling best practices, and engaging in reflective and analytical processes (Ribble, 2008).

Extension into the digital realm. Adults and students use the Internet with increased characteristics of dependency and intimacy that Belk (2013) described as less of a tool usage and more of a realm where one spends time living. The author goes on to report that the digital realm and physical realm have a bidirectional influence on one another and possess the ability to change thinking patterns and habits of individuals. The power of this dual-realm influence is so strong that marketing teams of companies have begun to design digital experiences that have been proven to stimulate physical desires for their products (Belk, 2013). Ribble and Bailey (2005) recognized this trend close to a decade ago and proposed that schools begin instruction that encompassed digitally focused topics including: rights, literacy, security, access, etiquette, communication,

responsibility, education, and commerce. The International Society of Technology in Education echoed this call as they listed digital citizenship as one of their core skills for 21st century learners (Greenhow & Robelia, 2009). While there are many examples of how digital citizens behave, O'Brien (2010) shared that the overarching goal is to cause others to think empathetically in a paradox of being connected with many individuals digitally, while physically being alone. The literature has demonstrated that this goal rarely occurs naturally with technology restriction policies, thus an instructional approach is necessary (Ribble & Bailey, 2005). Scholars have indicated that a more proactive approach to digital citizenship may reduce harmful byproducts, such as Internet addiction and poor ergonomics, while providing students with the mindsets required to use the digital realm to enhance their cognitive capacity (Hollandsworth, Dowdy, & Donovan, 2011; Lan & Lee, 2013).

Social media. The rapid adoption and continued use of social media is another example of a historical pattern of technological advancement outpacing the consideration of necessary moral evolution (Bouhnik & Deshen, 2013). Greenhow and Robelia (2009) noted that the literature is largely absent on the topic of social media influence on academic outcomes. Social media platforms such as Facebook have "led to an increase in social capital and well-being by providing a forum for interaction and identity affirmation. [Social networking] strengthens the link between an individual's online and offline worlds…" (Reid & Boyer, 2013, p. 248). Belk (2013) described this experience as ongoing opportunities to try out various versions of oneself in an environment that is perceived as less threatening. Further, some study participants have reported that the digital reinforcement of these personas has had more supportive value than face-to-face

compliments (Reid & Boyer, 2013). The realization of an audience that is always present has also motivated students with a new heightened sense of efficacy to learn and share knowledge in authentic digital learning environments (James et al., 2010). Conversely, reckless comments are also made available to a limitless audience (Kosinski, Stillwell, & Graepel, 2012). The literature identified longevity of information on social media under the categories of both strength and danger, as content shared on these platforms become digital fossils and are available for future examination (Sasahara, Hirata, Toyoda, Kitsuregawa, & Aihara, 2013).

Digital culture. Bennett, Wells, and Rank (2009) found in multiple studies that schools did not adapt to include digital citizenship into their culture and character building education. Larson, Miller, and Ribble (2010) echoed this finding, despite school districts struggling with school concerns that involved digital misconduct. In the absence of outside influence, a culture is often established based upon the collective input of the users within the digital realm (Hollandsworth, Dowdy, & Donovan, 2011). Such norms yield strong roots as shared by the following young adult, who is considered a digital native, regarding the illegal downloading of music:

> I am completely comfortable stealing music. I believe this stems primarily from my early experiences with Napster, and the complete disconnect between the joy I felt downloading (and listening) to music, and any sense (or perceived existence) of downside risk. The rules may be clearer now, but my view of music downloading gestated when there was no transparent and consistent approach to intellectual-property laws and enforcement. (Tapscott, 2009, p. 87)

A common set of characteristics among digital natives, similar to the aforementioned individual, is a strong sense of efficacy that has not necessarily been tempered with self-regulation and ethical consideration regarding digital behavior (Chiang & Lee, 2011). Belk (2013) illuminated a concern with self-regulation regarding the challenges of maintaining an active presence in two realms simultaneously. The author additionally shared that study participants who did not frequently check social media messages had felt vulnerable and were inclined to occasionally post false, or trivial, information simply to remind other users of their digital existence.

Digital culture has also demonstrated the possibility of synthesizing itself into hateful propaganda. Citron and Norton (2011) showcased such an example in the 1984 establishment of a white supremacy Usenet bulletin board that identified targets for assassination. The authors further identified the recent creation of social media groups and videos which were posted and then removed, that glorified violence and instructed how and when to injure individuals based upon their ethnicity, hair color, and/or sexual orientation. Although bystanders see these sites and the physical actions that occur, Hollandsworth, Dowdy, and Donovan (2011) reported that up to 33 percent of the incidences were never reported. While the authors were unable to provide a clear reason as to why a report was never made, Lau and Yuen (2013) presented findings that demonstrated such digital behavior may be less likely to be perceived as wrong, illegal, or immoral. In their study, it was reported "48% of adolescents did not consider hacking to be a crime in a survey of 47,235 elementary and middle school students, and that adolescents appear to have a deficit when it comes to computer crimes" (Lau & Yen, 2014, p. 381). Gray (2012) added that characteristics of individuals committing digital

misconduct typically included high self-efficacy and a lack of social shame, possibly due to the absence of physical proximity to any victim. Multiple studies have indicated that if measures are to be taken proactively, they must be put into place when students are very young and with consistency (Hollandsworth et al., 2011; Lan & Lee, 2013).

Stakeholder perceptions. Elementary students have admitted that while they are comfortable using digital tools, they are less concerned about using the best and most ethical tool, but instead are more concerned with experiences that are enjoyable and visually appealing (Dresang & Koh, 2009). Greenhow and Robelia (2009) indicated that students do not feel teachers value the use of the social tools to which they gravitate, nor do teachers take infractions on social media platforms seriously. Chen (2007) indicated this perception may have partial merit, as teachers shared that they enjoyed the use of digital tools when the outcome resulted in an electronic product, yet rarely used social media platforms. Further, despite multiple studies that have indicated a strong sense of digital efficacy, Boyd (2012) quoted an educator as sharing, "I think students mainly have high levels of confidence in using social media technology but low confidence/competence in using technology for learning" (p. 117). Adding to teacher resistance were the beliefs some educators held that perhaps they lack the moral authority and/or ability to instruct students in the use of digital tools as vehicles of learning (O'Brien & Scharber, 2010; Ohler, 2012). Hammonds, Matherson, Wilson, and Wright (2013) agreed with the lack of self-efficacy in teaching technological ethics and called for a system-wide reform in thought, as teacher efficacy may be the strongest variable in the successful instruction of student digital citizenship.

Teacher Efficacy

Numerous studies have identified teacher efficacy as being one of the most important variables that influence student learning (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012; Liu, 2010). Teacher efficacy, also known as self-efficacy, is defined as "a belief in one's ability to organize and carry out what is needed in order to achieve important goals" (Adalsteinsson, Frimannsdottir, & Konradsson, 2014). Recent literature has clarified that self-efficacy has less to do with the quantity of skills one possesses, but rather is focused on the successful combination of such skills for expected, and novel situations (Ebrahim, 2012; Skaalvik & Skaalvik, 2014). When educators possess the characteristic of teacher efficacy, student/teacher relationships are typically strong and learning is frequently described as student centered (Ertmer et al., 2012).

Influence of teacher efficacy. Jong et al. (2014) asserted that awareness of teacher efficacy is critical to student growth as educators influence western students approximately 10,000 hours before their pupils exit their secondary experience. Hanna (2014) credited professional self-efficacy as a characteristic frequently held by teachers that have claimed to form bonds with students who were previously thought to be distant and disconnected from learning. Additionally, a study of 120 preservice teachers demonstrated teacher efficacy to have a positive influence on classroom management, effective instructional strategies, and enhanced student engagement (Jong et al., 2014). Other studies have found positive relationships between strong teacher efficacy and the desire to persevere in teaching failing students, the utilization of novel instructional practices, and a desire to pursue life-long learning (Ebrahim, 2012). While professionals possessing high self-efficacy have been found in all grade levels, in a study of 1,430

practicing teachers Klassen and Chiu (2010) reported that its frequency was higher among kindergarten teachers as well as teachers in the first half of their careers. Teacher efficacy was additionally reported with a higher frequency in small schools where professional relationships were described as strong (Jong et al., 2014). Reciprocally, schools that reported lower levels of teacher efficacy were less likely to have large student academic gains and frequently had problems with teacher retention (Ebrahim, 2012; Meristo & Eisenschmidt, 2014; Skaalvik & Skaalvik, 2014).

Preservice supports. Although students frequently create digital work to showcase their learning, a study of 190 preservice teachers reported feelings of low self-efficacy in using common technological platforms, such as Web 2.0 (Sadaf, Newby, & Ertmer, 2012). Peterson and McClay (2012) suggested that teacher preparatory programs make a philosophical shift of presenting technology as a vehicle for student learning while simultaneously shedding its reputation as a polishing instrument. McDonnough and Matkins (2010), as well as Meristo and Eisenschmidt (2014), have also underscored the importance of developing teacher efficacy in the preservice years when teacher belief systems are the most malleable. Feedback from strong teachers very early in their careers often have credited a strong sense of self-efficacy as an important variable that assisted with their perseverance during their first few years (Jong et al., 2014). These same teachers described the importance of cooperating teachers and supervisors that provided a blend of challenge and support during their classroom placements (McDonnough et al., 2010).

Teacher efficacy and technology. Despite a variety of overwhelming variables that confront a new teacher, a strong sense of teacher efficacy has been identified as the

strongest variable conducive to using technology for student learning (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012; Liu, 2011). Sadaf, Newby, and Ertmer (2012) clarified, however, that the ability of teachers to use technological tools for personal use does not hold the same effective value as a professional's self-efficacy in using these same tools for instructional purposes. Ertmer et al. (2012) categorized a lack of self-efficacy as "second-order barrier," which can become a long-lasting perception of oneself if not addressed early (p. 423). School leaders, however, have been successful in enriching the self-efficacy of such individuals by providing clear and well designed curricula, which include sequential and pedagogical insights (Cakir, Bichelmeyer, Duffy, Dennis, & Bunnage, 2009). While the curriculums incorporated specific tools, they provided categories from which educators could scaffold to new tools that may be useful for student learning (Jong et al., 2014; Meristo & Eisenschmidt, 2014).

When technology integration had been rejected, the literature frequently illuminated low teacher efficacy, as well as fear and intimidation (Peterson & McClary, 2012). Liu (2011) reported that even teachers who espoused a constructivist instructional philosophy, and saw learning driven by student experiences within technology integration, rejected the use of these tools with an explanation of not having strong enough pedagogical control over their use. A study of 12 teachers, recognized as strong technology integration educators, shared that these feelings of low self-efficacy, however, were enriched if the educator was surrounded by professional attitudes possessing characteristics of teacher efficacy and collegial support (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012).

Best practices for enriching teacher efficacy. Multiple studies have agreed that teacher efficacy is influenced most effectively when a school's culture is collaborative and supportive (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012; Serriere, 2013). Characteristics of these environments have included: a strong value placed on asking questions for learning, working with diversity, and finding personal meaning within district initiatives (Serriere, 2013). Additionally, school leaders were found to purposefully create environmental variables conducive to enhancing self-efficacy including "mastery experiences, psychological and emotional cues, vicarious experiences, and verbal persuasion" (Ebrahim, 2012, p. 68). Self-efficacy infused induction programs, professional development tailored to individual needs, and the establishment of formal professional learning communities were shown to also positively influence teacher efficacy (Adalsteinsson, Frimannsdottir, & Konradsson, 2014; Klassen & Chiu, 2010; Sadaf, Newby, & Ertmer, 2012). Finally, teachers attributed higher levels of self-efficacy to environments that embraced the reflection on mistakes as an important and expected component of professional growth (Hanna, 2014).

Summary

Elementary students are learning from experiences within the digital and physical realms (Hollandsworth, Dowdy, & Donovan, 2011). Literature has demonstrated that these digital tools have often been used for outcomes that have been academically enriching, while others have used the same tools to cause harm (Tan, 2011). Schools have begun to realize that citizenship and character education must evolve to encompass the portion of students' lives that take place in digital realms (Bennett, Wells, & Rank, 2009). In the process, however, schools must also provide a growth-centered

environment that is focused on the related fields of digital natives, cyberbullying, character education, and teacher efficacy (Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur, & Sendurur, 2012). Although students have been using digital tools to communicate and learn at school and home, the field of digital citizenship has only recently been given increased attention (Larson, Miller, & Ribble, 2010; Lau & Yen, 2013).

Although there has been some dispute over the existence of a special skill-set associated with those identified as digital natives, there is widespread agreement that this generation of individuals feels comfortable considering the Internet as an extension of themselves (Bittman, Rutherford, Brown, & Unsworth, 2011). Despite the danger of risks on the Internet, Thompson (2013) has encouraged adults to participate in digital experiences with their students, rather than solely restrict their access. Studies have demonstrated that when schools have created opportunities to interact and reflect digitally, students have begun to recognize how their traditional character education lessons have qualities that could be generalized to cyber environments (Arneback, 2014; Liddell, 2012; Marquez et al., 2014). Cassidy, Brown, & Jackson (2012) concluded that the result of combining digital experiences and character education, which are the components of digital citizenship, greatly reduced the use of cyberbullying. Interest in methods to reduce cyberbullying increased greatly in the 1980s through the 1990s to slow a growing trend of student suicides linked to the hurtful use of digital tools (Atik & Guneri, 2013). As students continued to have increased access to communication within the digital realm, school systems began to strengthen their digital citizenship practices of creating awareness, providing guided experiences, modeling ethical behavior, and engaging in reflection with students (Ribble, 2008).

The success of any instructional program rests on the self-efficacy possessed by the professionals responsible for its delivery (Liu, 2010). Although qualitative studies have been conducted focusing on teacher efficacy regarding technology integration, as well as on studies focused on the value of using technology in the classroom, the literature is absent of research focusing on teachers' value and self-efficacy regarding the instruction of digital citizenship (Bowen, 2013). These perceptions are necessary to understand as teacher efficacy has been reported to be the most influential school variable on student learning (Ertmer, Ottenbreit-Leftwich, Sendurur, & Sendurur, 2012). The purpose of this multi-site qualitative study was to explore elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship. This study further sought to explore educators' experiences conducive to both positive and negative feelings of value and efficacy related to digital citizenship. The methodology for conducting this research study will be discussed in Chapter Three.

Chapter Three – Methods and Procedures

Introduction

The purpose of this multi-site qualitative study was to explore elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship. This study further sought to explore educators' experiences conducive to both positive and negative feelings of value and efficacy related to teaching digital citizenship. The research questions aimed to understand teachers' perceptions of the instructional value of digital citizenship through the lenses of digital natives, character education, and the impact of cyberbullying. Further, the study's research questions sought to describe perceptions of teachers' efficacy as it related to teaching digital citizenship. Experiences responsible for forming these perceptions of value and efficacy also were explored and analyzed.

This multi-site qualitative study attempted to understand the present perceptions of value and efficacy that teachers hold regarding the instruction of digital citizenship as well as the experiences that created each of the former. Qualitative studies use questions to recreate reality seen through the eyes of participants in order for the researcher to understand their perceptions with both depth and clarity (Creswell, 2012; McMillan, 2008). Elementary teachers were asked to answer electronic survey questions in the form of a Likert-scale as well as open-ended responses. Participants were also asked to grant permission for one-to-one interviews with the researcher. Due to the exploratory nature of this study, a qualitative method of research was most effective.

Participants

Participants for this study consisted of 64 elementary teachers in South Central Pennsylvania. Elementary schools from seven districts, classified as suburban or rural, were invited from this region. Any certificated educator presently teaching within these schools was offered the opportunity to participate. Although permission was gained from all seven of the invited districts, voluntary participation included only five of the districts. The majority of the participants were general education teachers with classroom assignments ranging from kindergarten to sixth grade. Participants' years of experience ranged between newly hired to 25 or more years. Access to participants was gained by asking for research permission from district Superintendents or the employee designated as the gatekeeper for such an activity. Surveys were accessed through a link, embedded in an electronic document, and distributed by elementary principals or another specified employee based upon the protocol of each school district. One-to-one interviews occurred based upon the willingness of each participant. This was indicated by a response to a request for a one-to-one interview on the electronic survey.

Setting

All school districts asked to participate in this study were classified as rural or suburban school districts. The student population ranged from as few as 2,457 students to as many as 6,947 students. The grade arrangement of each elementary school varied based upon the structure of the individual district. Participation, however, was offered to all elementary teachers that instructed students in grades K-6. Therefore, an intermediate school consisting of grades five and six was offered participation. An invitation to participate was also offered to grade six teachers who instructed in a middle school. Each

school district held different philosophies regarding the importance of technology in the educational process and the lives of its students.

District A's elementary division consisted of four elementary schools that housed grades kindergarten through sixth. The district employed 117 elementary teachers and four elementary principals. The total enrollment at District A was 4,249 students. Three of the four elementary schools within District A were Title I schools, meaning that additional funding was provided as at least 40% of the students that attended a school were considered economically disadvantaged. District A's latest PSSA scores indicated that 86% of students scored proficient or advanced in math, and 81% of students scored proficient or advanced in reading. Both scores were higher than the Pennsylvania average. The ethnic background of District A was 69% Caucasian, 15% Hispanic, 7% African American, 5% Asian, 4% Multi-Racial, 0.07% American Indian/Alaskan Native, and 0.02% Native Hawaiian or other Pacific Islander.

District B's elementary division consisted of a primary school that housed kindergarten through second grade, and an intermediate school that contained third grade through sixth grade. The district employed 79 elementary teachers and two elementary principals. The total enrollment at District B was 2,864 students. Although both schools had Title I funds to serve students classified as economically disadvantaged, neither building received the Title I School-Wide Program. District B's latest PSSA scores indicated that 79% of students scored proficient or advanced in math, and 71% of students scored proficient or advanced in reading. While the district's math score was above the Pennsylvania average, the reading score fell below. The ethnic background of District B was 82% Caucasian, 10% Hispanic, 4% African American, 3% Multi-Racial,

1% Asian, 0.28% Native Hawaiian or other Pacific Islander, and 0.17% American Indian/Alaskan Native.

District D's elementary division consisted of one primary center that housed kindergarten through third grade, five elementary schools that housed kindergarten through sixth grade, and one intermediate center that housed fourth grade through sixth grade. The district employed 207 elementary teachers and seven elementary principals. The total enrollment at District D was 6,947 students. Although three of the schools had Title I funds to serve students classified as economically disadvantaged, the buildings did not have access to the Title I School-Wide Program based upon their socioeconomic status. District D's latest PSSA scores indicated that 83% of students scored proficient or advanced in math, and 83% of students scored proficient or advanced in reading. Both scores were above the Pennsylvania average. The ethnic background of District D was 75% Caucasian, 13% Hispanic, 4% Asian, 4% African American, 3% Multi-Racial, 0.32% American Indian/Alaskan Native, and 0.04% Native Hawaiian or other Pacific Islander.

District E's elementary division consisted of three elementary schools that housed kindergarten through sixth grade. The district employed 97 elementary teachers and three elementary principals. The total enrollment at District E was 3,091 students. Although three of the schools had Title I funds that served students classified as economically disadvantaged, the buildings did not have access to the Title I School-Wide Program based upon their socioeconomic status. District E's latest PSSA scores indicated that 80% of students scored proficient or advanced in math, and 76% of students scored proficient or advanced in reading. Both scores were above the

Pennsylvania average. The ethnic background of District E was 84% Caucasian, 6% Hispanic, 3% Asian, 2% African American, 2% Multi-Racial, 0.13% American Indian/Alaskan Native, and 0.16% Native Hawaiian or other Pacific Islander.

District F's elementary division consisted of two primary center schools that housed kindergarten through second grade, one intermediate center that housed third grade through fifth grade, and one middle school that housed sixth grade through eighth grade. The district employed 83 elementary teachers, three elementary principals, and one middle school principal. The total enrollment at District F was 3,085 students. Although all four schools which housed elementary students had access to Title I funds to serve students classified as economically disadvantaged, the buildings did not have access to the Title I School-Wide Program based upon their socioeconomic status. District F's latest PSSA scores indicated that 89% of students scored proficient or advanced in math, and 88% of students scored proficient or advanced in reading. Both scores were above the Pennsylvania average. The ethnic background of District F was 88% Caucasian, 6% Hispanic, 2% Asian, 3% Multi-Racial, 1% African American, 0.03% American Indian/Alaskan Native, and 0.03% Native Hawaiian or other Pacific Islander.

Instruments

In order to explore teacher perceptions of value and efficacy regarding the instruction of digital citizenship, teachers were asked to complete an electronic survey created by the researcher. To assist with data collection and the creation of a simplified user interface, the survey was designed with a purchased tool, SurveyMonkey. Each survey began with nine required demographic questions. Participants were then asked to answer 18 questions using Likert-scale statements (Appendix A). McMillan (2008)

indicated that Likert-scales are commonly used and accepted to measure attitudes and values as favorable or unfavorable. Participants were also asked to answer five open-ended questions to expand upon particular topics for the researcher.

The researcher also conducted follow up interviews (Appendix B) with willing participants as indicated by a survey response item and the input of their contact information, in order to deepen participant perceptual feedback. Participants were asked to answer six semistructured questions that illuminated participant survey responses. The survey questions were given to a pilot group of educators prior to the actual study. This group consisted of individuals not part of the study and provided feedback regarding the clarity of the set of questions. Creswell (2012) indicated that one-to-one interviews are effective for expanding on a particular topic for the researcher.

Reliability and Validity

The researcher took measures to ensure the instrument was both reliable and valid. Reliability "is the extent to which what is recorded as data is what actually occurred in the setting that was studied," as well as the study's potential to be replicated under similar circumstances (McMillan, 2008, p. 296). In an effort for the study to hold high reliability, the researcher followed the recommendations of Creswell (2012) that included: ensuring questions were clear, procedures for the survey and interviews were consistent, and participants were made to feel at ease when interviews were conducted. The methods, procedures, and instruments were described in a manner that allowed for replication and enhanced reliability.

To ensure the study's internal validity was high, triangulation was used through the process of collecting data from Likert-scale questions, open-ended questions, and

one-to-one interviews. McMillan (2008) defined validity as the extent to which tools appropriately measure that which they claim to measure, as well as "the extent to which inferences are appropriate and meaningful" (p. 144). By utilizing multiple methods of data collection, the study had enhanced accuracy and credibility (Creswell, 2012).

After interview questions were developed, the survey was administered to a pilot group of 15 teachers who met the same criteria as the sample population. The pilot group provided information regarding the actual length of time for survey completion, identified survey questions that were confusing, and indicated questions that may have led participants to a particular response. The feedback from this pilot group was used to modify the survey's content and format. This process enhanced the tool's validity and reliability.

Design of the Study

A multi-site qualitative research design was used to explore elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship to students. The design for the collection of data included three methods to achieve triangulation. Two methods were accessed by the use of an electronic survey that contained 18 Likert-scale questions and five open-ended questions. The third method of data collection included one-to-one interviews. Respondents who indicated a willingness to be interviewed provided their contact information to the researcher who then contacted the interviewee in order to decide upon a mutually suitable time and date.

Special precautions were taken to ensure the data collected were free of researcher bias or observer effect. Participants that completed the survey remained anonymous in an effort to examine the data objectively. Additionally, the interviews conducted were

completed without the knowledge of any link to participants' survey responses. The researcher interviewed seven participants that elected to be part of this data collection method. If more than 15 participants had indicated their willingness to be interviewed, the researcher would have randomly selected the individuals for participation. Observer effect, specifically the halo effect, was of particular concern during one-to-one interviews. "The halo effect occurs when an observer allows an initial impression about a person or group to influence subsequent observations" (McMillan, 2008, p. 176). To avoid this, the researcher prepared an introduction that was used consistently prior to the one-to-one interviews. With permission, all interviews were also recorded and transcribed to ensure the information collected was accurate.

Procedure

The study began by sending out letters of consent to the Superintendents of the selected seven school districts within South Central Pennsylvania. This letter outlined the purpose of the study, assured that the anonymity of respondents was maintained, and indicated that notification of Immaculata University's Research Ethics Review Board approval would be sent once it was received. Once approval had been granted from willing school districts, the researcher submitted the study to Immaculata University's Research Ethics Review Board (RERB) (Appendix C) to ensure that the subjects' rights would be protected. When approval had been received, willing superintendents were contacted with RERB approval verification and the electronic letter with all necessary documentation for data collection. This letter was then provided to principals or another staff member identified by the superintendent for elementary teacher dissemination.

Individuals willing to participate were given information regarding the purpose of the study, the length of the survey and approximate time for completion (15-20 minutes), as well as assurance that their input would be anonymous. All participants answered nine demographic questions, and then were asked to answer 18 questions using Likert-scale statements. The final question asked participants if they were willing to be part of a one-to-one interview arranged at a later time. Participants that provided their phone number or email address in a specified field designated their willingness to participate in a one-to-one interview. These individuals were contacted by the researcher to arrange a time and location that was convenient for the participant.

The researcher followed a consistent protocol for interviews to enhance reliability. A limited number of initial conversational interactions were planned and executed to reduce observer bias. Interviews occurred in person or were conducted by phone. Participants were also provided with a consent form to sign. The form indicated that the interview was to be recorded to allow the researcher to conduct further analysis. Participants were also reminded that they had the ability to stop the interview at any time. The researcher then provided six semistructured questions. "Semistructured questions do not have predetermined structured choices. Rather, the question is open-ended yet specific in intent, allowing individual responses" (McMillan, 2008, p. 177). Interviews were transcribed and examined for themes. All survey and interview data is stored on a flash drive indefinitely and locked in a secure location. Any data in paper form will be shredded after five years. Only the researcher of the study has access to this data.

Data Analysis

Qualitative studies require researchers to explore data in an effort to understand overarching themes (McMillan, 2008). The data collected from the surveys and interviews were examined and descriptively reported. To extrapolate key concepts, data analysis in this study utilized steps outlined by Creswell (2012) that included transcribing, coding, identifying themes, and describing the central phenomenon regarding elementary teachers' perceptions of value and efficacy related to teaching digital citizenship. First, Likert responses, open-ended responses, and interview responses were sorted by their corresponding research question. Next, open-ended responses and interview responses were coded based upon themes that emerged. Finally, filtering and comparison tools in SurveyMonkey were utilized to enhance efficiency, accuracy, and examine for patterns within the collected data.

Summary

The purpose of this multi-site qualitative study was to explore elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship. This study further sought to explore educators' experiences conducive to both positive and negative feelings of value and efficacy related to teaching digital citizenship. Participants for this study consisted of 64 elementary teachers in South Central Pennsylvania. Elementary schools from seven districts, classified as suburban or rural, were invited from this region. Multiple methods of data collection were used to construct an accurate understanding of the participants' perceptions of value and efficiency. The researcher used an electronic survey that included Likert-scale questions as well as open-ended questions. A third method, one-to-one interviews with semistructured questions,

was utilized to enhance validity through triangulation. Participants willing to be interviewed did so freely and experienced a carefully planned and executed process to ensure the study was reliable. The data gathered from the study was categorized and analyzed to answer the research questions. The findings of this research study will be presented in Chapter Four.

Chapter Four – Results

Introduction

This multi-site qualitative research study explored elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship. This study further sought to explore educators' experiences conducive to both positive and negative feelings of value and efficacy related to digital citizenship.

This chapter reports the results of the survey and interview data. Responses were collected from five school districts, classified as either suburban or rural, in South Central Pennsylvania. Participants were elementary teachers who voluntarily accessed an online survey consisting of demographic questions, Likert-scale statements, and open-ended questions. Responses were also obtained through follow-up interviews with seven elementary teachers. Survey and interview responses were coded to identify themes that surfaced within three areas: (1) elementary teachers' perceptions of value regarding the instruction of digital citizenship; (2) elementary teachers' perceptions of self-efficacy regarding the instruction of digital citizenship; and (3) prior experiences that led to the development of their perceptions of value and self-efficacy regarding the instruction of digital citizenship.

School District Information

Permission to conduct the study was granted by seven school districts in South Central Pennsylvania. Although participation was offered to each of the seven school districts in the manner instructed by the district official, final participation was represented by only five of the seven districts. Specific demographic information from the five participating districts was reviewed in Chapter Three. Each district was coded

with the letter, A, B, C, D, E, F, or G in order to protect the identity of each participating district and maintain confidentiality. District A comprised 13 (20%) of the participants, District B comprised 15 (24%) of the participants, District D comprised 18 (28%) of the participants, District E comprised 12 (19%) of the participants, and District F included the final 6 (9%) of the participants in the study. Individuals in District C and District G did not access the survey.

Participants

Electronic survey responses were obtained from 64 elementary teachers; however, not all participants answered every question. Seven elementary teachers contacted the researcher for one-to-one interviews. Five of the interviews took place in person. The two remaining participants were interviewed by phone.

Survey

The survey consisted of nine demographic items, 18 Likert-scale statements, and 5 open-ended questions. The Likert-scale statements consisted of the following possible responses: strongly agree, agree, undecided, disagree, and strongly disagree. Six of the Likert-scale statements focused on elementary teachers' perceptions of value regarding the instruction of digital citizenship. Six of the Likert-scale statements sought to explore elementary teachers' perceptions of self-efficacy as it related to instructing digital citizenship. Finally, six Likert-scale statements were focused on identifying experiences incurred by elementary teachers that developed their perceptions of value and efficacy regarding the instruction of digital citizenship.

There were nine survey questions designed as multiple-choice, demographic items that collected information about participants' school district of employment, gender,

professional role, years of teaching experience, highest level of education obtained, involvement in technology focused professional learning communities, affiliation as a digital native/immigrant, social media usage, and their exposure to a district-created character education curriculum. Participants were either provided with options that created a range of choices, or a small number of options that related to the particular question. Table 4.1 and Table 4.2 are summaries of the survey responses regarding the demographic information collected from the 64 participants.

Table 4.1

Summary of Survey Participants According to District and Professional Role

School District	Total	Primary Teacher (K-3)	Intermediate Teacher (4-6)	Learning Support	Specialist A	Specialist B
District A	13	2	7	3	0	1
District B	15	3	8	2	1	1
District D	18	8	2	5	1	2
District E	12	6	4	1	0	1
District F	6	2	1	1	1	1
Total	64	21	22	12	3	6

Note. N=64 Learning Support includes: Special Education, English as a Second Language, Gifted Education, and Speech Therapist. Specialist A includes: Music, Art, Physical Education, and Library. Specialist B includes: Reading Specialist, Math Specialist, and Instructional Coach.

Open-ended responses. The electronic survey was also comprised of five open-ended questions. Two open-ended questions were designed to collect additional information from participants regarding their perceptions of value as it pertained to the instruction of digital citizenship. Two additional open-ended questions were designed to collect more detailed information from participants regarding their perceptions of self-efficacy as it related to instructing digital citizenship. Finally, one open-ended question was designed to illuminate experiences encountered by elementary teachers that

Table 4.2

Summary of Survey Participants According to Demographic Information

Gender	Male	Female	No Response			
	7	56	1			
Years of Experience	0-5 years	6-20 years	21-30 years	30 + years		
	10	40	8	6		
Highest Level of Education	Bachelor's	Bachelor's +24	Master's or Equivalency	Doctorate		
	4	6	53	1		
Member of Tech. PLC	Yes	No				
	37	27				
Technology Affiliation	Digital Native	Digital Immigrant				
	25	39				
Social Media Use	Facebook	Twitter	LinkedIn	Instagram	Pinterest	No Response
	54	16	12	23	49	2
District Character Education Curriculum	Yes	No	No Response			
	40	23	1			

Note: N=64

developed their perceptions of value and efficacy regarding the instruction of digital citizenship.

Interview responses. The 64 survey participants were invited to contact the researcher to express a willingness to take part in a one-to-one interview, which consisted of six questions. The interview questions were designed to provide participants the opportunity to expand upon the answers provided within the electronic survey. Further, the additional qualitative data derived from one-to-one interviews allowed the researcher to triangulate all of the data collected. This increased the study's reliability and validity. Three questions were designed to solicit specific and detailed information regarding the participants' perceptions of value in regard to the instruction of digital citizenship. Three questions were designed to further explore participants' perceptions of self-efficacy as it

related to instructing digital citizenship. Finally, one interview question was designed to examine experiences incurred by elementary teachers that developed their perceptions of value and efficacy regarding the instruction of digital citizenship.

Research Question One

What are the perceptions of elementary teachers regarding the value of instructing digital citizenship to students?

Research question one was addressed using data from the electronic survey, accompanying open-ended questions, and interview responses. Participants' perceptions of value regarding the instruction of digital citizenship were explored in six Likert-scale statements (10, 11, 14, 15, 16, and 17) within the electronic survey. The participants that responded to statements 10 and 17 indicated agreement that digital citizenship was valuable at the elementary level. Statement 10 revealed that 50 (96%) of the participants either agreed or strongly agreed that there is a need for elementary schools to teach digital citizenship. One participant responded as undecided, one individual disagreed, and twelve participants did not respond. Further, statement 17 indicated that 38 (73%) of the participants believed digital citizenship's instructional value is as important, and appropriate, at the elementary level as it is at the secondary level. However, six (12%) participants responded as undecided, eight (15%) individuals expressed disagreement, and twelve participants did not respond. Statement 11 sought to examine which digital competencies held the most instructional value at the elementary level. Participants were able to rate multiple competencies as holding equal value. Within the participants that responded to statement 11, 42 (81%) of the teachers believed digital security to be of most value, 40 (77%) of the teachers ranked digital etiquette as having the most value,

while 36 (69%) of the teachers believed digital literacy to be the competency the held the greatest value. When participants were asked to share their perception of their district's level of value regarding the instruction of digital citizenship, the majority of the teachers provided a supportive response. According to the data collected, 40 (77%) of the teachers either agreed or strongly agreed that their district valued the creation of instructional opportunities that would foster digital citizenship. Additional examination of the statement revealed that 10 (19%) teachers were undecided, 2 (4%) individuals disagreed, and 12 participants did not respond. Further, 40 (80%) of the teachers that responded to statement 16 indicated either agreement or strong agreement that a comprehensive character educational curriculum included digital citizenship instruction. Within the same statement seven (14%) participants were undecided, three (6%) expressed disagreement, and fourteen did not respond. Finally, statement 14 indicated participant agreement that the competency of digital communication had influence on their students either emotionally and/or academically. The data revealed that 40 (77%) of the participants indicated either agreement or strong agreement with the aforementioned statement, 5 (10%) participants were undecided, 7 (13%) individuals expressed disagreement, and 12 participants did not respond. Table 4.3 and Table 4.4 indicate the level of agreement regarding the Likert-scale statements pertaining to the instructional value of digital citizenship.

Open-ended responses. Teacher participants were asked to respond to two open-ended questions (30 and 31) to provide further information regarding their perceptions of value instructing digital citizenship to elementary students. Question 30 requested that participants describe the components of a successful digital citizenship lesson.

Table 4.3

Teachers' Perceptions of Value Regarding the Instruction of Digital Citizenship

		Participant Response					
	Statement	SA	A	U	D	SD	NR
10.	I believe there is a need for elementary schools to teach students how to act as digital citizens.	34	16	1	0	1	12
14.	I believe digital communication (voice calls, text messages, social media etc.) influences my students emotionally and/or academically.	20	20	5	6	1	12
15.	I believe my district values the creation of instructional opportunities for students to experience digital citizenship.	16	24	10	2	0	12
16.	A comprehensive character education curriculum includes digital citizenship.	18	22	7	3	0	14
17.	Digital citizenship instruction is more important and/or appropriate for middle/high school rather than elementary school.	0	8	6	26	12	12

Note. N=64 SA=Strongly Agree, A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree, NR=No Response

Table 4.4

Teachers' Perceptions of Value Assigned to Digital Citizenship Competencies

	Participant Response					
These digital competencies have value.	SA	A	U	D	SD	NR
Digital Access: full electronic participation in society	15	32	3	1	1	12
Digital Commerce: electronic buying and selling of goods	12	30	9	0	1	12
Digital Communication: electronic exchange of information	29	21	1	0	1	12
Digital Literacy: process of teaching, learning, and using technology	36	16	0	0	0	12
Digital Etiquette: electronic standards of conduct or procedure	40	11	1	0	0	12
Digital Rights and Responsibilities: freedoms extended in the digital world	29	20	2	0	1	12
Digital Law: electronic responsibility for actions and deeds	35	15	2	0	0	12
Digital Health: physical and psychological well- being in a digital technology world	26	21	5	0	0	12
Digital Security: electronic precautions to guarantee safety	42	9	1	0	0	12

Note. N=64 SA=Strongly Agree, A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree, NR=No Response

Participants provided a variety of responses, however, a number of responses fell into one or more of five themes that emerged: (a) technical use, (b) awareness of technology's influence on others, (c) adult modeling of appropriate digital behavior, (d) practice utilizing behaviors conducive to safety, and (e) responses that revealed that some

participants did not possess the knowledge to identify the components of a successful digital citizenship lesson.

Nine of the participants indicated that technical usage was an important characteristic, and articulated the importance of creating an environment where all students go beyond discussion and are able to engage with technology. As one teacher stated, “Technology should be in the hands of every student.” Another teacher posited, “Like any high quality instruction, teachers must use a gradual release of adult direction while students are using their equipment.” Seven of the participants shared feedback that fell under the theme of helping students recognize the influence technology may have on others when used frequently. One participant shared, “The lesson must include how to use electronics in an acceptable way, and how to communicate effectively because of not being face to face.” Further, six of the participants’ responses fell under the theme of teachers modeling best practices. As one teacher indicated, “Digital citizenship modeling must occur before, during, and after the lesson.” Five of the participants shared that digital citizenship at the elementary level should be rooted in safety. Finally, seven of the participants indicated that they were unable to identify the components of a successful digital citizenship lesson. One teacher explained, “I am not sure what this would look like. I am an elementary music teacher, and although I think digital citizenship is very important, I have not (and probably would not) specifically teach a digital citizenship lesson.”

Question 31 served as the second open-ended opportunity, which explored participants’ perceptions of value in regard to the instruction of digital citizenship. Participants were asked to describe how digital citizenship has benefited the elementary

student population. Themes that emerged from this question included: (a) early technology introduction, (b) preparation for societal demands, (c) enhanced safety, (d) reduction of harmful interactions, and (e) enhanced digital literacy.

Thirteen of the participants shared that one benefit of digital citizenship at the elementary level included early exposure to technology. One teacher shared, "Students are growing up with so much technology around them. We need to get them learning about it right from the start so that they can be good digital citizens." Another teacher echoed the value of an early technological introduction with, "…it has to start in kindergarten. Hopefully it started in the home even before this. Educate and protect…those words come up over and over!" Eleven of the participants indicated that digital citizenship instruction at the elementary level was necessary to keep up with societal expectations. One teacher responded, "They need years of practice before getting into the years where they are surrounded with all of it." Additionally, the related themes of safety comprised six of the responses while reduction of harmful interactions equated to five of the participants' responses. One teacher shared the importance of safety as it related to unsupervised technology usage through the response, "I believe a lot of my students use websites at home without parental guidance. They may find, or do, things that may not be totally safe." Another participant emphasized the importance of digital safety at the elementary level. Through the lens of reducing harmful digital behaviors, one teacher shared, "They need to be aware that behaviors online have the same effect as behaviors offline. There is a cause and an effect." Finally, four of the participants valued the instruction of digital citizenship for its perceived ability to enhance digital literacy and instructional opportunities. One participant offered,

"Students are more engaged in lessons. It provides teachers with more opportunities to differentiate instruction."

Interview responses. Interview responses provided further insight into the first research question. Seven survey participants volunteered to take part in one-to-one interviews. Three interview questions (1, 3, and 6) were designed to create an opportunity for the researcher to have additional insight into the participants' survey responses regarding their perceptions of value pertaining to the instruction of digital citizenship. Interview question one asked participants to share possible outcomes that might occur if digital citizenship was taught in their learning environment. Furthermore, interview question three sought to explore specific details related to the teachers' perceptions of value regarding the instruction of digital citizenship. Interview question six asked participants to share any closing remarks or questions regarding digital citizenship. Three participants used this opportunity to share additional insight regarding their perceptions of digital citizenship's value.

Many of the themes that emerged during one-to-one interviews were consistent with the survey and open-ended responses. Four themes, however, that were discussed by the majority of the interview participants included: (a) the benefit of early exposure, (b) enhanced reflection and self-efficacy, (c) proactive support of academic content, and (d) a lack of clarity regarding professional responsibility as it related to digital citizenship. Participant IP5 stated the following:

> We live in a world where, unfortunately, nothing can ever be blindly trusted to be totally safe. This includes social media, which is so involved in our everyday lives. Students are aware of that at a very young age. They are texting, using

> Facebook, and jumping on each new bandwagon. The earlier they are taught to immerse themselves in our digital and global society in a positive way, the more likely they are to act accordingly.

Participant IP3 discussed the enhancement of reflection with the following:

> [Students] are asking a pod member what they think. They are taught to think how others might take [the comment] if they were reading it, and try to get more feedback. This generation is great with technology, but they don't always understand the consequences once it is out there.

Participant IP2 added the characteristic of generalization to the importance of early exposure and shared, "These values need to be set up as school-wide expectations." Further, multiple participants acknowledged their instructional time is limited, however, indicated that digital citizenship contributes to the foundation of a productive learning environment. Participant IP4 shared, "You really don't have time to teach all that stuff, but you need to take the time." Participant IP7 expressed its importance as a proactive measure and stated, "A planned conversation is always better than putting out a fire. So really, it comes back to productivity. The time you take now will allow your time later to be more productive."

The final theme that emerged was a desire for direction regarding the role of the educational community and, specifically, where the role of educator ends and parent begins in regard to the instruction of digital citizenship. Participant IP7 stated, "I would love to sit down and have our district fully explain exactly what we are going to do about digital citizenship. What is it, how does it apply to our classrooms, and how can we make a difference?" Likewise, Participant IP2 stated, "There are things that go on

outside of school as well. The same could be said for character in general. How much of that is the school's responsibility?"

Research Question Two

What are the perceptions of elementary teachers regarding their efficacy in instructing digital citizenship to students?

Research question two was addressed using data from the electronic survey, accompanying open-ended questions, and interview responses. Participants' perceptions of self-efficacy regarding the instruction of digital citizenship were explored in six Likert-scale statements (18, 19, 20, 21, 22, and 23) within the electronic survey. Likert statements 18 and 23 were designed to explore participants' perceptions of self-efficacy regarding digital citizenship through a reactive and proactive lens. Statement 18 sought to examine how confident teachers felt in helping students solve school conflict that originated on the Internet. The data revealed that 18 (35%) of the teachers disagreed and 17 (33%) were undecided regarding confidence in this area. In contrast, 15 (29%) teachers expressed agreement, while 13 participants did not respond. Statement 23 was designed to examine if participants believed they have taught a lesson that had enhanced student growth in digital citizenship. Participant responses indicated that 29 (57%) of the teachers agreed with this statement, while 10 (20%) were unsure, 12 (24%) expressed disagreement, and 13 individuals did not respond. Statement 19 sought to examine participants' perceptions of self-efficacy regarding their ability to create new instructional opportunities to experience digital citizenship. The data revealed that 29 (58%) of the teachers agreed that they had the self-efficacy to create such environments, while 13 (26%) of the participants were undecided, 8 (16%) disagreed, and 14 did not respond. In

a similar manner, statement 20 sought to examine participants' perceptions of self-efficacy regarding their ability to create successful discussions regarding digital citizenship (not necessarily experiences). Participants demonstrated a greater level of confidence as evidenced by 41 (79%) of the teachers agreed or strongly agreed with this statement. The same statement revealed that eight (15%) individuals were undecided, three (6%) disagreed, and twelve teachers did not respond. Likert statements 21 and 22 examined teacher's self-efficacy that was derived from other educational stakeholders. Statement 21 explored teachers' perceptions regarding the degree to which colleagues and supervisors encouraged digital citizenship lessons. Within the participants that responded, 26 (51%) of the teachers either disagreed or strongly disagreed that they had been encouraged or supported by other professionals to design digital citizenship lessons. The data further revealed that 17 (33%) had felt supported, 8 (16%) were undecided, and 13 did not respond. Finally, statement 22 sought to explore teachers' perceptions that parents would support the instruction of digital citizenship by modifying practices at home. The data collected revealed that 28 (54%) teachers expressed either agreement or strong agreement with the aforementioned statement; however, 15 (29%) of the participants were undecided and 9 (17%) disagreed. Twelve participants did not respond. Table 4.5 indicates the level of agreement with the statements pertaining to the perceptions of self-efficacy held by teachers regarding the instruction of digital citizenship.

Open-ended responses. Teacher participants were asked to respond to one open-ended question to provide further information regarding their perceptions of self-efficacy

Table 4.5

Teachers' Perceptions of Self-Efficacy Regarding the Instruction of Digital Citizenship

	Statement	Participant Response					
		SA	A	U	D	SD	NR
18.	I feel confident in helping students solve school conflict that has taken place on the Internet.	0	15	17	17	2	13
19.	I believe I have the ability to create instructional opportunities for students to experience digital citizenship.	4	25	13	8	0	14
20.	I believe I have the ability to create instructional opportunities for students to discuss (not necessarily experience) the characteristics of digital citizenship.	4	37	8	3	0	12
21.	I've been encouraged by colleagues or supervisors to teach lessons that include digital citizenship goals.	2	15	8	18	8	13
22.	I believe parents will support the instruction of digital citizenship at home if they are asked to do so and are provided with the necessary resources.	4	24	15	8	1	12
23.	I have provided instruction that has taught my students how to use Internet tools responsibly and constructively.	4	25	10	8	4	13

Note. N=64 SA=Strongly Agree, A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree, NR=No Response

as it was related to the instruction of digital citizenship to elementary students. Question 29 requested that participants further describe the support offered by colleagues and administrators to enhance the instruction of digital citizenship. Participants provided a variety of feedback, however, a number of responses fell into one or more of five support themes that emerged: (a) formal professional development, (b) employment of a technology coach, (c) supply of necessary technical equipment, (d) informal support, and (e) responses that revealed that some participants did not feel supported to instruct digital citizenship lessons.

Eight of the participants indicated that formal professional development was provided regarding technology and digital citizenship specifically. One teacher stated, "Our district often provides technology training (which includes digital citizenship concepts)." Eight of the participants shared feedback that fell under the theme of a technology coach provided by the district. One participant shared an early experience with a digital citizenship lesson and stated, "Our technology coach came into my

classroom at the beginning of the year to discuss what a digital citizen is." Another participant cited access to a technology coach and shared, "Our technology coach is at our school one to three days a week." Seven of the participants responded under the theme of support by having the proper equipment in the classroom. Each of the individuals referenced a one-to-one program that placed a computerized device in the hands of every child in a particular grade level during the entire school day. One teacher stated, "I think we are in the infancy stage of instructing digital citizenship. With our move to a one-to-one program, administration is realizing the need for a more comprehensive digital citizenship program for our students." Four of the participants shared that colleagues and administrators had supported them informally. One teacher shared, "Several colleagues are digital natives and have brought new technology into the classroom. As they have taught students how to use it responsibly, I have learned." Finally, eight of the participants indicated that they felt colleagues or administrators had not supported the instruction of digital citizenship. One teacher shared, "We have a 1:1 program with students and need to do a better job impressing upon them appropriate use of technology. We don't have much support when students are using it inappropriately." Further, one participant revealed that a lack of support had affected interactions with students. The teacher stated the following:

> The last content provider I introduced to my students, one that we are expected to use, I stood in front of my class and said I had no idea how to navigate the website. The students and I learned together. So, I guess I feel like the support we've been given is lacking.

Interview responses. Interview responses provided further insight into the second research question. Three interview questions (2, 4, and 6) were designed to create an opportunity for the researcher to have additional insight into the participants' survey responses regarding their perceptions of self-efficacy relating to the instruction of digital citizenship. Interview question two asked the seven participants to describe challenges that educators must overcome in teaching digital citizenship. Additionally, interview question four sought to explore what resources were needed for teachers to feel high levels of self-efficacy regarding the instruction of digital citizenship. Finally, interview question six asked participants to share any closing remarks or questions regarding digital citizenship. Three participants used this opportunity to share additional insight regarding their perceptions of self-efficacy as it related to the instruction of digital citizenship.

Similar to the interview responses corresponding to research question one, the one-to-one interviews that focused on research question two identified themes that were consistent with the research question's open-ended responses. The majority of those interviewed, however, provided responses that were categorized into five themes. The themes regarding challenges in teaching digital citizenship included: (a) identification of critical competencies, (b) reacting to students' digital violations, and (c) maintaining current knowledge amidst ongoing updates in technology. Themes related to resources needed for self-efficacy regarding digital citizenship included: (d) an enhanced digital citizenship knowledge base with formal training and (e) time for peer collaboration to develop best instructional practices. Participant IP5 shared, "I think the biggest barrier for me is that I don't know where to start." Participant IP2 stated, "Simply identifying what digital citizenship lessons to teach is overwhelming. It's not just about teaching

how to use the Internet." Participants IP2 and IP3 shared concern with how to provide restorative instruction when students exhibited purposeful digital violations. Participant IP3 felt that students are able to stay a step ahead of adults and shared, "Kids know how to wipe history or act like they didn't know better." Participant IP2 provided another example through the following response: "We've had two students this year that were able to circumvent the firewall. They got into some real inappropriate pictures." The challenge of staying abreast of updates in technology, in order to understand the ethical implications, was shared by participant IP7. This participant stated the following:

> I think the challenge is that there are so many different forms of technology always changing. The teacher has to become an expert on the use of each tool before they fully understand the value that connects to digital citizenship and how to effectively teach that.

On the topic of necessary resources to enhance teachers' self-efficacy in teaching digital citizenship, participant IP7 stated, "I need a clear definition from my district and administrators about what digital citizenship is, and tools to meet that goal." Participant IP2 echoed a need for district-generated tools and shared, "You don't always just find the right stuff. It is hard to be confident if you simply aren't sure if what you have is good enough." Finally, participants shared a need for peer collaboration in an effort to be systemic and purposeful with their instruction of digital citizenship. Participant IP1 stated, "We need time so that we can be consistent and pervasive in getting quality digital citizenship instruction to our students." Further, participant IP4 stated, "You need to have mentors and be in touch with your tech people all the time to know what can be

done in the classroom and what is happening in the world of technology outside of school."

Research Question Three

What prior experiences do elementary teachers credit to forming their perceptions regarding the value and efficacy of teaching digital citizenship to students?

Research question three was addressed using data from the electronic survey, accompanying open-ended questions, and interview responses. Participants' perceptions of value regarding the instruction of digital citizenship were explored in six Likert-scale statements (12, 13, 24, 25, 26, and 27) within the electronic survey. Statement 12 sought to examine which digital competencies teachers believed they had successfully addressed throughout their instruction. Of those who responded to statement 12, 39 (76%) of the teachers responded that they had successfully taught a lesson incorporating digital literacy, 27 (53%) of the participants indicated that they had provided successful instruction regarding digital etiquette, and 26 (51%) of the teachers indicated that they had taught a lesson in digital communication. Statement 13 asked participants to share their level of agreement regarding the adequacy of professional development they had been given in the same competencies. The same three categories emerged, in the same order, with slightly lower percentages. Of those who responded to statement 13, 29 (57%) of the teachers shared that they had been provided adequate professional development in digital literacy, 24 (47%) of the participants indicated adequate support in digital etiquette, and 21 (39%) of the teachers shared they had been provided adequate professional development in the competency of digital communication. Statement 24 revealed that 39 (75%) of the participants either agreed or strongly agreed that

technology is used for learning on a regular basis in their classrooms. In contrast, four (8%) participants responded as undecided, nine (17%) teachers indicated disagreement, and twelve individuals did not respond. In statement 25, 43 (83%) of the teachers either disagreed or strongly disagreed that the use of technology within instruction reduced the focus on other academic content. The data further revealed that one (2%) teacher was undecided, eight (15%) participants indicated agreement, and twelve individuals did not respond. Statement 26 sought to explore if participation in technology-driven professional learning communities, or the use of professional journals, had enhanced teachers' instruction of digital citizenship. Twenty (38%) of the teachers indicated disagreement, 15 (29%) individuals were undecided, 24 (46%) expressed agreement, and 12 did not respond to the aforementioned statement. Finally, statement 27 explored the teachers' perceptions of the likelihood that their students used digital communication tools at home while unsupervised. Forty-one (82%) of the participants shared either agreement or strong agreement, 7 (14%) were undecided, 2 (4%) expressed disagreement, and 14 individuals did not respond. Table 4.6, Table 4.7 and Table 4.8 indicate the level of agreement with the statements pertaining to experiences shaping teachers' perceptions of value and self-efficacy regarding the instruction of digital citizenship.

Open-ended responses. Teacher participants were asked to respond to two open-ended questions to provide further information regarding the experiences that have developed their perceptions of value and self-efficacy as it related to the instruction of digital citizenship to elementary students. Question 28 presented a request to further explain experiences that developed a sense of self-efficacy focused on instructing digital citizenship. A number of responses fell into one or more of four themed experiences that

Table 4.6

Teachers' Experience of Successful Digital Citizenship Instruction

I have taught a successful digital citizenship lesson in the following competencies.	Participant Response					
	SA	A	U	D	SD	NR
Digital Access: full electronic participation in society	3	8	7	20	13	13
Digital Commerce: electronic buying and selling of goods	1	0	6	24	20	13
Digital Communication: electronic exchange of information	6	20	6	10	9	13
Digital Literacy: process of teaching, learning, and using technology	11	28	3	3	6	13
Digital Etiquette: electronic standards of conduct or procedure	9	18	5	12	7	13
Digital Rights and Responsibilities: freedoms extended in the digital world	7	5	9	18	12	13
Digital Law: electronic responsibility for actions and deeds	4	12	10	14	11	13
Digital Health: physical and Psychological well- being in a digital technology world	2	4	13	21	11	13
Digital Security: electronic precautions to guarantee safety	6	13	7	14	11	13

Note. N=64 SA=Strongly Agree, A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree, NR=No Response

Table 4.7

Teachers' Experience of Professional Development in Digital Citizenship Instruction

I have been provided adequate professional development to teach the following competencies.	Participant Response					
	SA	A	U	D	SD	NR
Digital Access: full electronic participation in society	2	11	7	23	8	13
Digital Commerce: electronic buying and selling of goods	1	2	6	30	12	13
Digital Communication: electronic exchange of information	4	16	10	14	7	13
Digital Literacy: process of teaching, learning, and using technology	5	24	6	11	5	13
Digital Etiquette: electronic standards of conduct or procedure	4	20	4	16	7	13
Digital Rights and Responsibilities: freedoms extended in the digital world	3	6	9	24	9	13
Digital Law: electronic responsibility for actions and deeds	4	11	9	17	10	13
Digital Health: physical and Psychological well- being in a digital technology world	2	4	10	24	11	13
Digital Security: electronic precautions to guarantee safety	3	8	14	18	8	13

Note. N=64 SA=Strongly Agree, A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree, NR=No Response

emerged: (a) assistance from colleagues, (b) personal technology usage, (c) formal professional development, and (d) observations of a general societal need. Three of the participants indicated that the experience of being informally helped by their colleagues led to their perceptions of self-efficacy in instructing digital citizenship. Teachers

Table 4.8

Teachers' Experiences Forming Perceptions of Value and Self-Efficacy Regarding the Instruction of Digital Citizenship.

	Statement	Participant Response					
		SA	A	U	D	SD	NR
24.	My students use technology for learning on a regular basis in my classroom.	15	24	4	5	4	12
25.	When I use technology as a component of my instruction, the focus on the content (math, reading, science/social studies) is reduced.	2	6	1	32	11	12
26.	Professional learning communities and/or professional journals have enhanced my instruction of digital citizenship.	2	22	8	15	5	12
27.	It is likely that my students use digital communication tools at home unsupervised.	22	19	7	1	1	14

Note. N=64 SA=Strongly Agree, A=Agree, U=Undecided, D=Disagree, SD=Strongly Disagree, NR=No Response

described their impromptu meetings with technology specialists as well as informal conversations that originated in committee work. Nine teachers pointed to personal technology use as a foundation to their perceptions of self-efficacy regarding the instruction of digital citizenship. One participant shared, "I have an interest so I look into things on my own. I have children in their 20s so I had to learn to understand what they were doing." Another participant stated, "Simply being a digital native has given me confidence." Other participants, however, indicated that formal experiences had shaped their perceptions of self-efficacy. Ten educators cited that they have become more comfortable with the idiosyncrasies of different technological tools due to graduate courses, workshops, and conferences. The category that garnered the largest number of responses, however, was a general belief based upon a need created through observations over time. Of the 18 responses under this theme, one participant shared, "Any feelings I have of self-efficacy regarding digital citizenship are based on my beliefs regarding the general citizenship and courtesies of society." Another teacher stated, "I have watched children make poor choices with technology and bullying and feel that we do not do

enough to impress upon them the consequences of inappropriate usage. I know we must do better."

Question 32 asked participants to further describe their students' technology experiences in and out of school. The responses fell into one or more of the following four themes that emerged: (a) academic work, (b) gaming, (c) social media, and (d) harmful behaviors. Twenty-eight participants indicated that their students used technology primarily for academic purposes during school, and often for a continuation of that purpose while at home. One teacher shared, "My students use their desktop computers for STAR Math, Waterford, and typing their writing pieces. They also use websites like ABCya, PBS Kids, and Starfall in and out of school." Another participant stated, "I will often direct my students to a digital resource to introduce or reinforce concepts and/or background knowledge." Nineteen participants shared that their students were likely to use technology for gaming outside of school. One teacher noted the following:

> Many parents are unaware of the online personal communication that their children have access to, and are taking advantage of. It appears that they are playing a game, but many are corresponding to people from other states and countries. I have had several children who have been exposed to language and developmentally inappropriate subject matter, and in return, are having inappropriate conversations at school.

Further, 16 teachers indicated that social media was used by their students outside of school. One participant elaborated and stated, "Students are frequently allowed to use social media alone at home, even at a very young age." Finally, three participants

identified specific student technology usage that resulted in harmful outcomes. One teacher shared, “We’ve had bullying occur with Vine and Instagram.” Another participant stated, “Students have been taught how to use these tools, but not how to use them to respectfully interact with others.”

Interview-responses. Interview responses provided further insight into the third research question. Two interview questions (5 and 6) were designed to create an opportunity for the researcher to gain additional insight into the participants’ survey responses regarding the experiences that created teachers’ perceptions of value and self-efficacy relating to the instruction of digital citizenship. Interview question five asked the seven participants to describe a lesson that they had taught, or witnessed, that had provided growth to students as digital citizens. Interview question six asked participants to share any closing remarks or questions regarding digital citizenship. Two participants used this opportunity to share additional insight regarding their digital citizenship experiences.

As the researcher reviewed the responses to interview question five and six, the following themes emerged: (a) lessons focused on online communication and (b) physical discussion of digital behavior. Educators shared that the instruction of online communication frequently involved students taking an active role in the process. Participant IP1 shared the following:

> We are all using Schoology, so we do a whole lesson on how we have conversations on a discussion board. We actually have a Schoology Sheriff that polices the discussions. It is interesting because although I have the student

> sheriff, there are other little marshals that show up and tell others when they are using Schoology inappropriately. They do this online and in person.

Participant IP3 additionally shared the following:

> We do lots of modeling, but it has to transfer to when the kids are doing their online communication. I use a made up character named Stu Estudianta. Stu will post some rather inappropriate things. Students talk about what it should look like. They actually practice writing back to Stu to attempt to help him.

Teacher IP2 echoed the sentiments of the former participants, and shared "We had to make it clear that you can't just make comments without thinking about how your comment might be interpreted or misinterpreted." Additionally, teachers frequently cited the use of class meetings to draw attention to features of digital citizenship. Participant IP5 shared, "We have many class meetings throughout the year and we hope something sticks with them." Participant IP4 described a lesson focused on digital awareness in the following:

> We talked in a class meeting about what happens when you post something. We talked about how many people could see that. I think that is a surprise to children because kids are very self-centered. That's just where they are developmentally. It is important for them to see and discuss examples and non-examples.

Summary

This chapter reviewed the data that were collected and analyzed to explore elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship. This study further sought to explore educators' experiences conducive to both positive and negative feelings of value and efficacy related to digital citizenship.

Data were collected through an online survey instrument that contained Likert-scale statements as well as open-ended questions. Sixty-four elementary teachers participated in this survey; however, not all participants answered every question. As part of this multi-site qualitative study, interview data were also collected from elementary teachers who volunteered for further participation in the research study. A total of seven elementary teachers participated in follow-up interviews with the researcher. Responses to survey questions were categorized and reported in various tables. Further, responses to open-ended questions were examined for themes and discussed within each research question. Implications of the patterns that occurred will be discussed in Chapter Five. Suggestions will be offered concerning future research that may emerge from this study. Finally, the relationship of the results to prior research and any conclusions that were drawn from the results will also be discussed in Chapter Five.

Chapter Five - Discussion

Introduction

This study investigated the perceptions of elementary teachers regarding digital citizenship in five school districts in South Central Pennsylvania. The study examined elementary teachers' perceptions of value regarding the instruction of digital citizenship to elementary students. Further, the study explored elementary teachers' perceptions of self-efficacy as it related to the instruction of digital citizenship. Finally, the study examined elementary teachers' prior experiences that may have formed their perceptions of value and self-efficacy related to the instruction of digital citizenship. Chapter Five provides a discussion of the results of this study.

Summary of the Study

The purpose of this qualitative study was to explore elementary teachers' perceptions of value and efficacy regarding the instruction of digital citizenship. The sample population for this study consisted of elementary teachers within five school districts in South Central Pennsylvania. An electronic survey was made available to all elementary teachers within five school districts through an email invitation. A total of 64 elementary teachers provided electronic consent to participate in the electronic survey; however, not all participants answered every question.

The online survey was designed to collect data related to the research questions which guided the study. Nine questions were designed to collect demographic data from the participants. Eighteen Likert-scale statements were utilized to determine the degree of agreement the participants had with the perceptual statements. Five questions were open-ended in order to allow the participants to provide additional narrative data.

Participants who volunteered to complete the electronic survey were also given the opportunity to contact the researcher to participate in the interview portion of the study. A total of seven elementary teachers volunteered to be involved in follow-up interviews. The purpose of the interviews was to clarify and expand upon responses from the survey questions and to provide more in-depth understanding regarding the research questions. The data were collected, categorized, analyzed, and reported within Chapter Four. Chapter Five offers a discussion of the findings from the study.

Summary of the Results

This study was guided by three research questions related to the perceptions of elementary teachers regarding the instruction of digital citizenship. Research question one addressed elementary teachers' perceptions of value as it related to the instruction of digital citizenship. Research question two addressed perceptions of self-efficacy held by elementary teachers regarding their ability to instruct digital citizenship. Research question three specifically addressed the prior experiences that elementary teachers credited to forming their perceptions of value and self-efficacy related to the instruction of digital citizenship. Summaries of the findings from the participants' responses are listed below.

Research question one. Data were collected and analyzed through participant survey and interview responses. Key findings that were identified through the lens of teachers' value regarding digital citizenship are discussed in the following sections.

Elementary teachers' responses to Likert-scale statements. A large majority of elementary teachers shared perceptions that indicated a belief that digital citizenship had a place within an elementary education setting. Upon closer examination of responses

from various groups, as classified by the initial demographic questions, this perception was shared across participants' subgroups. Levels of agreement from different positions ranged from 94% to 100%. The same held true for digital natives and digital immigrants who shared agreement with the value of digital citizenship at the elementary level with 20 participants (95%) of 21, and 30 (97%) individuals of 31 respectively. Through a review of value attributed to digital citizenship's competencies, 42 (81%) of the teachers strongly agreed with digital security's value, 40 (77%) of the teachers strongly agreed with digital etiquette's value, and 36 (69%) of the teachers strongly agreed with digital literacy's value.

While all participants of the aforementioned categories agreed that digital citizenship had value at the elementary level, not all participants expressed this setting as the optimal location for digital citizenship's instruction. Of the 50 individuals that shared agreement with the appropriateness of digital citizenship to be taught at the elementary level, 12 (24%) of those participants indicated that the topic was better suited for the secondary level. Five of those individuals were digital natives, while seven were digital immigrants. Further, 7 (50%) of the participants that shared agreement with digital citizenship being better suited for the secondary level were primary teachers. The aforementioned results identified that, while primary teachers may have perceived digital citizenship as valuable, an underlying belief for some was that it fit more effectively within later grade levels.

Research question one also sought to explore teachers' perceptions of value related to the instruction of digital citizenship through the lens of affective influence on students. Two questions were specifically designed to discuss how digital citizenship

affected students emotionally, as well as its importance in a comprehensive character education curriculum. Forty (77%) of the participants agreed that digital communication influenced their specific students academically and/or emotionally. A total of 13 (62%) digital natives shared agreement, while 27 (87%) digital immigrants agreed with the statement. Each group of digital natives and digital immigrants in agreement consisted of a proportionate number of primary and intermediate teachers. Of the 21 primary teachers that responded, 11 (53%) of the subset indicated agreement. Likewise, of the 22 intermediate teachers that responded, 20 (89%) of the subset indicated agreement. These results indicated that professional assignment in this study created a greater level of dissention than technology affiliation as a digital native or digital immigrant.

When participants were asked to share their perceptions of digital citizenship's value within a district's character education program, 40 (80%) participants expressed agreement. The remaining 10 participants expressed either uncertainty or disagreement. Their data was then isolated in an attempt to gain insight into their feedback. This particular group of 10 participants, comprised of an approximately equal number of digital natives and digital immigrants, shared open-ended responses that specifically stated a lack of understanding for what effective digital citizenship instruction looks like, or shared feedback that indicated digital citizenship to be something taught outside of what might be considered the normal routine of a day.

Elementary teachers' responses to open-ended questions and interviews. Open-ended questions and follow-up interviews sought to understand participants' value of digital citizenship regarding the components necessary for success as well as the desirable outcomes expected from successful digital citizenship instruction. When

participants were asked to describe successful components of a digital citizenship lesson, three of the themes that emerged included: (a) an understanding of the influence that digital actions have on others, (b) the importance of including teacher modeling, and (c) a lack of understanding regarding successful digital citizenship instructional components. Although the number of participants representing each theme totaled less than 10, it is worth noting that digital immigrants made up the majority of those who felt modeling and an awareness of influence was an important component in a digital citizenship lesson. Further, digital natives comprised the majority of participants who specifically stated that they were unable to share the components of successful digital citizenship lesson. In summary, digital immigrants in this study were more likely to recognize the explicit pedagogical strategies needed to create authentic digital citizenship learning environments.

Interview participants, comprised of both digital natives and digital immigrants, all shared a desire to have their district further articulate a clear vision, as well as pragmatic teacher actions, to effectively deliver digital citizenship to their students. Despite a need for more information for digital natives and digital immigrants alike, both groups were equally represented in their perception that the instruction of digital citizenship would benefit students by enhancing their readiness for the demands of society, all the while developing behavior conducive to digital and physical safety.

Research question two. Data were collected and analyzed through participant survey and interview responses. Key findings regarding teachers' perceptions of self-efficacy related to digital citizenship are discussed in the following sections.

Elementary teachers' responses to Likert-scale statements. Elementary teachers indicated that they felt higher levels of self-efficacy hosting discussions of digital citizenship rather than creating authentic learning experiences where students might engage in digital citizenship behaviors. Responses revealed that participants who stated low self-efficacy in discussing digital citizenship were likely to be digital natives and/or within their first 15 years of teaching. Further, participants perceived their self-efficacy to be lower when asked about their ability to teach an authentic digital citizenship lesson. While 41 (79%) of the teachers described sufficient self-efficacy to host digital citizenship discussions, only 29 (58%) of all participants shared perceptions that they could teach authentic digital citizenship lessons. The same data viewed through the lenses of the demographic subgroups revealed that 9 (47%) of the 19 primary teachers, compared to 12 (71%) of the 17 intermediate teachers, agreed that they had the self-efficacy to instruct digital citizenship lessons. Further, participants' membership in a technology focused professional learning community seemed to correlate with levels of self-efficacy. Twenty (77%) of those that expressed agreement with adequate levels of self-efficacy in teaching engaging digital citizenship lessons also held membership in technology-based professional learning communities.

Encouragement from peers and administrators was reported low from all participants, as only 17 (33%) of the teachers were able to affirm that they felt clear support from others to teach digital citizenship from others. The level of encouragement varied little between demographic subgroups. Although reports of collegial and/or administrative encouragement were generally low for all participants, the data revealed that a lack of encouragement might have hindered feelings of self-efficacy to teach

authentic digital citizenship lessons. Eleven (34%) of twenty-nine respondents who reported adequate levels of self-efficacy in teaching digital citizenship lessons, did not feel supported by the adults around them. In addition, 15 (71%) of the 21 teachers who were unsure, or expressed disagreement with their ability to teach digital citizenship lessons, indicated that they did not feel supported by their colleagues or administrators.

The influence of stakeholders beyond the school walls, as well as digital events that occurred outside of school, were examined to explore their influence on the self-efficacy of teachers in relation to digital citizenship. Slightly more than half of all participants indicated that they believed parents would support their schools' efforts in teaching digital citizenship. Those teachers who indicated that they had primary teaching assignments shared the highest percentage of agreement. Thirty-six (71%) of all participants, however, shared that they either disagreed or were unsure that they could adequately support digital conflict that had started at home and was carried into school as either a physical or digital issue. Results indicated that the presence of a character education program, or its absence, had little influence on this particular facet of self-efficacy.

Elementary teachers' responses to open-ended questions and interviews. Open-ended questions and follow-up interviews sought to understand participants' perceptions of self-efficacy related to the instruction of digital citizenship. Teachers that felt confident in their ability to deliver authentic digital citizenship lessons often expressed that they felt supported by: (a) a district supplied technology coach, (b) professional development, and (c) district provided digital equipment so that the majority of students could be engaged. Although open-ended questions did not express any dissatisfaction

with the aforementioned support structures, the stated supports did not meet the needs shared by interview participants when asked about challenges that teachers face and resources necessary to find success in digital citizenship instruction. Teachers expressed that professional development was provided, which focused specifically on a particular tool and how it could be used to drive academic success. The participants that were interviewed, however, felt that a void existed regarding instruction that provided pragmatic opportunities for students to be engaged in digital citizenship behaviors. Further, the responses seemed to indicate that feelings of self-efficacy in teaching digital citizenship might have been stronger if a district had clearly articulated a vision, definition, and essential topics to be covered by each grade level.

Research question three. Data were collected and analyzed through participant survey and interview responses. Key findings regarding teachers' prior experiences leading to the development of their value of self-efficacy related to digital citizenship are discussed in the following sections.

Elementary teachers' responses to Likert-scale statements. A large majority of participants indicated that their students have frequently used technology on school grounds for learning. Percentages of agreement varied little when comparing primary teachers to intermediate teachers, as well as those involved in professional learning communities to those without involvement is such groups. Although technology was being used regularly, it was not clear if its use espoused competencies of digital citizenship. The digital citizenship competency that garnered the highest level of agreement for usage throughout instruction was digital literacy, which is largely comprised of teaching technical usage of a tool.

Further, teachers across all professional assignments surveyed shared that it was their experience that their students have unsupervised access to digital communication tools at home. The perceptions of primary teachers were of no exception as 14 (74%) of the 19 primary teachers that responded shared either agreement or strong agreement. This feedback was only slightly less than intermediate teachers, with 14 (78%) of 18 respondents expressing agreement or strong agreement. All but one of the study's participants that responded in the affirmative also expressed that digital citizenship had value at the elementary level.

Finally, the majority of teachers indicated that their time developing their technological skills as a professional, as well as time spent using technology in their instructional delivery, had positive outcomes. Forty-three (83%) of all participants shared that their experiences using technology throughout instruction did not hinder the instruction focused on a core academic area. Further, although only 37 (58%) of all participants took part in professional learning communities involving technology, the majority of those individuals shared responses that indicated they had value. Of the 29 teachers who shared that they use technology with their students on a regular basis, 28 were involved in technology-based professional learning communities and of these, 20 (71%) expressed that the experience provided growth in digital citizenship instruction.

Elementary teachers' responses to open-ended questions and interviews. Participants were asked to elaborate on experiences that focused on professional support, how they perceived their students utilized technology across environments, and the details of successful digital citizenship lessons instructed and/or observed. When asked to provide experiences that created a strong sense of self-efficacy to teach digital

citizenship, educators credited informal help from colleagues, as well as formal programs. Participants, however, often attributed a sense of urgency to engaging in discussions about digital citizenship to their perceptions that students frequently fell into a trap of engagement in undesirable online digital behaviors. Teachers rarely moved this explanation from a generalized comment to pragmatic examples and explained that a successful classroom solution seemed fairly nebulous. Further, participants indicated that they believed their elementary students typically used technology for academic, gaming, and social media purposes. Open-ended responses frequently revealed that the participants felt very little self-efficacy in changing students' digital behavior at home.

As participants discussed successful digital citizenship lessons they had conducted, experiences that incorporated a blend of a controlled online discussion board and a physical classroom discussion were credited as being most successful. Teachers went on to underscore the importance of incorporating physical and digital class meetings, which utilized previous digital discussion as the element of focus. One participant created a fictional digital student who would display mildly inappropriate digital behavior. The students were then charged to interact digitally with this individual in order to simulate problem solving within a digital realm.

Limitations Found in the Study

Several limitations, in addition to those outlined in Chapter One, arose during this study. The most significant limitation that emerged as the study progressed was the number of participants who did not fully complete the survey. When questions were unanswered it was unknown if the participants decision was due to an accident, a desire to skip the question, or a lack of knowledge on the topic. Non-responders may have

reduced the clarity of aspects of the study, thus resulting in a limitation. Additionally the majority of individuals who voluntarily participated described themselves as primary or intermediate elementary teachers, with only 12 participants who indicated they were learning support teachers, as well as 9 who described themselves as specialists. The lack of participation from these professional categories greatly reduced the ability to use their cohorts as comparative subgroups, and reduced potential insights into their value and self-efficacy related to the instruction of digital citizenship. Moreover, participation in the study was limited to five suburban and/or rural school districts in South Central Pennsylvania. As a result, the study cannot be generalized to teachers from other geographic regions, to teachers at the secondary level, or to those educators in urban settings whose perceptions of value and self-efficacy regarding the instruction of digital citizenship may differ based upon variables not considered in this study. Finally, because this study was based upon the perceptions of the 64 individuals willing to participate, it cannot be generalized to all school settings.

Relationship to Other Research

This study explored teachers' perceptions of value and self-efficacy related to the instruction of digital citizenship. This study further sought to explore educators' experiences conducive to both positive and negative feelings of value and efficacy related to digital citizenship. A critical finding in this study was the data's revelation that primary teachers' perceptions of value and self-efficacy of digital citizenship instruction was frequently lower than that of intermediate teachers. Multiple studies have articulated the importance of well-developed digital citizenship instruction starting from the onset of schooling (Lan & Lee, 2013; Ribble, 2014). Similar to previously conducted studies,

primary teachers shared perceptions that digital citizenship was valuable at the elementary level, however, felt it may be most valuable within the intermediate grades (Hollandsworth, Dowdy & Donovan, 2011). While Klassen and Chiu (2010) shared that teacher efficacy had been frequently reported as higher within primary teachers, teachers' perceptions of self-efficacy involving the instruction of digital citizenship did not have similar results in this study. As indicated by Monks, Robinson, and Worlidge (2012) a lack of intervention within early levels frequently has resulted in digital citizenship instruction occurring after students have developed set patterns of behavior.

Prior to focusing on designing instructional techniques within individual grade levels, the study indicated that district and building level administrators must provide focus and pragmatic direction within the realm of digital citizenship. The study's participants consistently stated that a stronger foundation of digital citizenship competency must be built, which echoed the work of Tangen and Campbell (2010). As expressed by Cakir, Bichelmeyer, Duffy, Dennis, and Bunnage (2009), participants frequently cited a lack of clear curricular direction and pedagogical insights as a primary barrier. Further, teachers' responses confirmed previous literature, which indicated students frequently had access to digital communication at home while unsupervised (Vandoninck, d'Haenens, De Cock, & Donoso, 2011). As a result, participants shared frustration with incidents that spilled over from home into school. In addition to teachers' expressed feelings of inconvenience, their perceptions of feeling ill equipped to handle poor digital behavior matched pervious literature (Paul, Smith, & Blumberg, 2012). Participants cited their inaction as a result of a lack of clear direction from their supervisors regarding how deep professionals should travel into student digital behavior.

Uncertainty regarding crossing the boundary from school to home has frequently been cited as inhibiting teaching rooted in affective instruction (O'Brien & Scharber, 2010; Ohler, 2012).

Finally, data from this study identified a finding that presented a contrast to previous research. As individuals claiming memberships as digital natives and digital immigrants shared responses regarding self-efficacy and execution of digital citizenship lessons, those classified as digital immigrants shared the highest level of success. Monks, Robinson, and Worlidge (2012) indicated that successful digital citizenship instruction required creative and authentic environments. Although the number of digital natives and digital immigrants who participated were equally distributed, digital immigrants were more likely to provide pragmatic examples of weaving digital citizenship into well-established instructional pedagogy. Further, the use of pre-discussion and reflection of digital citizenship competencies, high-yield strategies as discussed by Schussler and Knarr (2013), were responses provided almost exclusively from digital immigrants. While earlier literature had put digital immigrants at a disadvantage in utilizing technology within instruction, results from this study provided data that may indicate a shift in expertise (Kirschner & Karpinkski, 2010). Open-ended data and interview responses indicated that many digital immigrants followed Ebrahim's (2012) strategies for enriching teacher efficacy including sharing mastery experiences with colleagues, creating informal networks to meet emotional needs, and the creation of vicarious experiences. If such behaviors were born out of a sense of urgency to adapt, as digital immigrants felt in years past, it is possible that digital natives may have not mimicked

such actions due to pre-established levels of comfort (Bittman, Rutherford, Brown, & Unsworth, 2011).

Recommendations for Further Research

This study explored teachers' perceptions of value and self-efficacy related to the instruction of digital citizenship. This study further sought to explore educators' experiences conducive to both positive and negative feelings of value and efficacy related to digital citizenship. The findings of this study should not be generalized as a result of its limitations. This study represents a category of qualitative research in its infancy. Additional research is necessary to enrich understanding regarding the perceptions associated with the instruction of digital citizenship. Specific suggestions for future research include:

1. Conduct a similar study conducted in a school district's virtual academy to examine elementary teachers' perceptions of value and efficacy related to digital citizenship.
2. Conduct a similar study focused on the perceptions of secondary teachers, administrators and/or community stakeholders
3. Conduct a study focused on techniques successfully employed by administrators, technology staff, and teacher technology leaders that have resulted in increased perceptions self-efficacy, and digital citizenship instruction, at the primary level.
4. Conduct a comparative study examining reactive measures taken by a district that has experienced a tragedy, as a result of undesirable digital citizenship, to

examine its effectiveness longitudinally compared to proactive measures presently being used by surrounding school districts.

5. Conduct a study designed to examine pre-service teacher's perceptions of value and self-efficacy regarding the instruction of digital citizenship.

Conclusion

The findings of this study indicated that participants desired a clear and unified district vision, as well as a pragmatic action plan, in order for teachers' to develop the self-efficacy necessary to provide authentic lessons infused with digital citizenship. Findings also showcased that primary teachers needed support to recognize the value digital citizenship held within early grade levels, as well as support structures to enhance the self-efficacy felt in regard to instructing digital citizenship. Finally, results revealed that those classified as digital immigrants may have successful experience rooted in digital citizenship that may be beneficial to their teammates.

There are several practical implications of the findings in this study. The access and usage of digital tools will continue to be a ubiquitous feature of education and recreation (Hammonds, Matherson, Wilson, & Wright, 2013). The following suggestions are offered to assist educators in delivering digital citizenship growth to young individuals developing patterns of behavior they will likely carry into adulthood:

1. Include digital citizenship within district and building level comprehensive planning documents.
2. Create a unified support system of well-informed and collaborative adults by including parent leaders in the community during planning meetings. Discuss how the school and home setting are able to support one-another.

3. Create opportunities for teachers to observe best practices within their district, to teach their colleagues their particular strengths within digital citizenship, and to utilize resources that will allow staff members to feel abreast of present updates.
4. Employ digital citizenship instruction that enables all students to pre-discuss situation specific scenarios, engage in digital communication, and reflect on the strengths, as well as the needs, of individuals and the entire group.

This multi-site qualitative study sought to explore elementary teachers' perceptions of value and self-efficacy regarding the instruction of digital citizenship. A student's ability to maximize learning opportunities relies heavily on the quality of verbal and physical interactions an individual encounters as he or she grows academically and emotionally (Hollandsworth, Dowdy, & Donovan, 2011). The value associated with such interactions creates an impact, regardless of their existence, as physical or digital entities. For this reason, educators must be prepared to guide students to use digital tools for constructive purposes, rather than destructive means. The findings of this study may provide useful information to school districts seeking to evaluate their staffs' readiness to effectively deliver digital citizenship instruction that will enhance the quality of, and perhaps save, student lives.

References

Adalsteinsson, R. I., Frimannsdottir, I. B., & Konradsson, S. (2014). Teachers' self-esteem and self-efficacy. *Scandinavian Journal of Educational Research, 58*(5), 540-550.

Arbour, R., Signal, T., & Taylor, N. (2009). Teaching kindness: The promise of the humane approach. *Society and Animals, 17*(2), 136-148.

Arneback, E. (2014). Moral imagination in education: A Deweyan proposal for teachers responding to hate speech. *Journal of Moral Education, 43*(3), 269-281.

Atif, Y. (2012). Conversational learning integration in technology enhanced classrooms. *Computers in Human Behavior, 29*(2), 416-423.

Atik, G., & Guneri, O. Y. (2013). Bullying and victimization: Predictive role of individual, parental, and academic factors. *School Psychology International, 34*(6), 658-673.

Bauman, S. (2011). Cyberbullying in a rural intermediate school: An exploratory study. *The Journal of Early Adolescence, 30*(6), 803-833.

Beachum, F. D., McCray, C. R., Yawn, C. D., & Obiakor, F. E. (2013). Support and importance of character education: Pre-service teacher perceptions. *Education, 133*(4), 470-480.

Belk, R. W. (2013). Extended self in a digital world. *Journal of Consumer Research, 40*(3), 477-500.

Bennett, W. L., Wells, C., & Rank, A. (2009). Young citizens and civic learning: Two paradigms of citizenship in the digital age. *Citizenship studies, 13*(2), 105-120.

Beran, T. N., Rinaldi, C., Bickham, D., & Rich, M. (2012). Evidence for the need to support adolescents dealing with harassment and cyber-harassment: Prevalence, progression, and impact. *School Psychology International, 33*(5), 562-576.

Biladeau, S. (2009). Technology and diversity: Perceptions of Idaho's digital natives. *Teacher Librarian, 36*(3), 1-3.

Bittman, M., Rutherford, L., Brown, J., & Unsworth, L. (2011). Digital natives? New and old media and children's outcomes. *Australian Journal of Education, 55*(2), 161-175.

Bouhnik, D., & Deshen, M. (2013). Unethical behavior of youth in the Internet environment. *The International Journal of Technology, Knowledge, and Society, 9*(2), 109-124.

Bowen, S. A. (2013). Using classical social media cases to distill ethical guidelines for digital engagement. *Journal of Mass Media Ethics, 28*(2), 199-133.

Boyd, V. (2012). "Whatever is means, you should have it": Exploring digital literacies in arts education. *Art, Design, & Communication in Higher Education, 11*(2), 111-124.

Brimi, H. (2008). Academic instructors or moral guides? Moral education in America and the teacher's dilemma. *The Clearing House, 82*(3), 125-130.

Cakir, H., Bichelmeyer, B. A., Duffy, T., Dennis, A., & Bunnage, J. (2009). Does it help teaching? Instructors' perceptions of a technology enhanced standards-based educational program. *International Journal of Human Sciences, 6*(2), 827-852.

Campbell, M. A., Slee, P. T., Spears, B. Butler, D, & Kift, S. (2013). Do cyberbullies suffer too? Cyberbullies' perceptions of the harm they cause to others and to their own mental health. *School Psychology International, 34*(6), 613-629.

Cassidy, W., Brown, K., & Jackson, M. "Under the radar": Educators and cyberbullying in schools. *School Psychology International, 33*(5), 520-532.

Chen, S. (2007). Instructional design strategies for intensive online courses: An objectivist-constructivist blended approach. *Journal of Interactive Online Learning, 6*(1), 72-86.

Chiang, L., & Lee, B. (2011). Ethical attitude and behaviors regarding computer use. *Ethics and Behavior, 21*(6), 481-497.

Citron, D. K., & Norton, H. (2011). Intermediaries and hate speech: Fostering digital citizenship for our information age. *Boston University Law Review, 91*(4), 1435-1484.

Conn, K. (2010). Cyberbullying and other student technology misuses in K-12 American schools: The legal landmines. *Widner Law Review, 16*(9), 89-100.

Creswell, J. W. (2012). *Educational research: Planning conducting, and evaluating quantitative and qualitative research.* Boston, MA: Pearson Education.

Cubukcu, Z. (2012). The effect of hidden curriculum on character education process of primary school students. *Educational Sciences: Theory & Practice, 12*(2), 1526-1534.

Dresang, E. T., & Koh, K. (2009). Radical change theory, youth information behavior, and school libraries. *Library Trends, 58*(1), 26-50.

Ebrahim, A. H. (2012). The self-efficacy of preservice elementary teachers in Kuwaiti science programs. *Education, 133*(1), 67-76.

Eden, S., Heiman, T., & Olenik-Shemesh, D. (2013). Teachers' perceptions, beliefs and concerns about cyberbullying. *British Journal of Educational Technology, 44*(6), 1036-1052.

English, A. (2011). Critical listening and the dialogic aspect of moral education: J.F. Herbart's concept of the teacher as the moral guide. *Educational Theory, 61*(2), 171-189.

Ertmer, P. A., Ottenbreit-Leftwich, A. T., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teacher beliefs and technology integration practices: A critical relationship. *Computers and Education, 59*(2), 423-435.

Feng, L, & Newton, D. (2012). Some implications for moral education of the Confucian principle of harmony: Learning from sustainability education practice in China. *Journal of Moral Education, 41*(3), 341-351.

Flanagan, K. S., Vanden Hoek, K. K., Shelton, A., Kelly, S. L., Morrison, C. M., & Young, A. M. (2013). Coping with bullying: What answers does children's literature provide?. *School Psychology International, 34*(6), 691-706.

Gardner, H., & Davis, K. (2013). Whither digital natives. *American Scholar, 82*(4), 14-18.

Gray, K. (2012). Stealing from the rich to entertain the poor?: A survey of literature on ethics of digital piracy. *The Serials Librarian, 63*(3-4), 288-295.

Greenhow, C., & Robelia, B. (2009). Informal learning and identity formation in online social networks. *Learning, Media and Technology, 34*(2), 119-140.

Hammonds, L., Matherson, L. H., Wilson, E. K., & Wright, V. H. (2013). Gateway tools: Five tools to allow teachers to overcome barriers to technology integration. *Delta Kappa Gamma Bulletin, 80*(1), 36-40.

Hanna, J. (2014). Connecting with sullen students: Using an emotionally honest classroom to reach out to disengaged students. *The Clearing House, 87*(5), 224-228.

Hollandsworth, R., Dowdy, L., & Donovan, J. (2011). Digital citizenship in K-12: It takes a village. *TechTrends, 55*(4), 37-47.

Howard, R. W., Berkowitz, M. W., & Schaeffer, E. F. (2004). Politics of character education. *Educational Policy, 18*(1), 188-215.

Hudd, S. S., Apgar, C., Bronson, E. F., & Lee, R. G. (2009). Creating a campus of integrity: Comparing the perspectives of full- and part-time faculty. *The Journal of Higher Education, 80*(2), 146-177.

Jalon, M. J., & Arias, R. M. (2013). Peer bullying and disruption-coercion escalations in student-teacher relationship. *Piscothema, 25*(2), 206-213.

James, C., Davis, K., Flores, A., Francis, J. M., Pettingill, L., Rundle, M., & Garnder, H. (2010). Young people, ethics, and the new digital media. *Contemporary Readings in Law and Social Justice, 2*(2), 215-284.

Joiner, R., Gavin, J., Brosnan, M. Cromby, J., Gregory, H. Guiller, J.,…Moon, A. (2013). Comparing first and second generation digital natives' internet use, internet anxiety, and internet identification. *Cyberpsychology, Behavior, and Social Networking, 16*(7), 549-552.

Jong, R., Mainhard, T., Tartwijk, J. V., Veldman, I., Verloop, N., & Wubbels, T. (2014). How preservice teachers' personality traits, self-efficacy, and discipline strategies contribute to the teacher-student relationship. *British Journal of Educational Psychology*, *84*(2), 294-310.

Kirschner, P. A., & Karpinski, A. C. (2010). Facebook and academic performance. *Computers in Human Behavior, 26*(6), 1237-1245.

Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, *102*(3), 741-756.

Kolikant, Y. B. (2010). Digital natives, better learners? Students' beliefs about how the Internet influenced their ability to learn. *Computers in Human Behavior, 26*(6), 1384-1391.

Kosinski, M., Stillwell, D., & Graepel, T. (2013). Private traits and attributes are predictable from digital records of human behavior. *Proceedings of the National Academy of Sciences of the United States of America*, *110*(15), 5802-5805.

Kowalski, R. M., Morgan, C. A., & Limber, S. P. (2012). Traditional bullying as a potential warning sign of cyberbullying. *School Psychology International, 33*(5), 505-519.

Lake, K. (2011). Character education for a children's rights perspective: An examination of elementary students' perspectives and experiences. *International Journal of Children's Rights, 19*(4), 679-690.

Lan, C. M., & Lee, Y. H. (2013). The predictors of internet addiction behaviours for Taiwanese elementary school students. *School Psychology International, 34*(6), 648-657.

Langett, J. (2013). Blogger engagement ethics: Dialogic civility in a digital era. *Journal of Mass Media Ethics, 28*(2), 70-90.

Larson, L., Miller, T., & Ribble, M. (2010). 5 considerations for digital age leaders: What principals and district administrators need to know about tech integration today. *Learning & Leading with Technology, 37*(4), 12-15.

Lau, W. W., & Yuen, A. H. (2013). Internet ethics of adolescents: Understanding demographic differences. *Computers & Education, 72*(1), 378-385.

LePage, P., Akar, H., Temli, Y., Sen, D., Hasser, N., & Ivins, I. (2011). Comparing teachers' views on morality and moral education, a comparative study in Turkey and the United States. *Teaching and Teacher Education, 27*(2), 366-375.

Liddell, D. L. (2012). Identifying and working through teachable moments. *New Directions for Student Services, 139*(1), 17-26.

Liu, S. (2011). Factors related to pedagogical beliefs of teachers and technology integration. *Computers & Education, 56*(4), 1012-1022.

Marées, N. V., & Petermann, F. (2012). Cyberbullying: An increasing challenge for schools. *School Psychology International, 33*(5), 467-476.

Marquez, B., Marquez, J., Vincent, C. G., Pennefather, J., Sprague, J. R., Smolkowski, K., & Yeaton, P. (2014). The iterative development and initial evaluation of *We Have Skills!,* an innovative approach to teaching social skills to elementary students. *Education and Treatment of Children, 37*(1), 137-161.

McDonnough, J. T., & Matkins, J. J. (2010). The role of field experience in elementary preservice teachers' self-efficacy and ability to connect research to practice. *School Science and Mathematics, 110*(1), 13-23.

McMillan, J. H. (2008). *Educational research: Fundamentals for the consumer*. Boston, MA: Pearson Education.

Meristo, M., & Eisenschmidt, E. (2014). Novice teachers' perceptions of school climate and self-efficacy. *International Journal of Education Research, 67*(1), 1-10.

Monks, C. P., Robinson, S., & Worlidge, P. (2014). The emergence of cyberbullying: A survey of primary school pupils' perceptions and experiences. *School Psychology International, 33*(5), 477-491.

Myers, C. A., & Thornham, H. (2012). Youthful "fictions", creative "journeys" and potential strategies of resistance. *Media, Culture & Society, 34*(2), 228-237.

O'Brien, D, & Scharber, C. (2010). Teaching old dogs new tricks: The luxury of digital abundance. *Journal of Adolescent & Adult Literacy, 53*(7), 600-603.

O'Brien, T. (2010). Creating better digital citizens. *The Australian Educational Leader, 32*(2), 1-2.

Ohler, J. (2012). Digital citizenship means character education for the digital age. *Education Digest, 77*(8), 14-17.

Orth, D., & Chen, E. (2013). The strategy for digital citizenship: Guiding our children in a digital world. *National Association of Independent Schools, 72*(4), 56-63.

Osguthorpe, R. D. (2009). On the possible forms a relationship might take between the moral character of a teacher and the moral development of a student. *Teachers College Record, 111*(1), 1-26.

Parker, W. C. (2001). *Social Studies in Elementary Education* (11th ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

Patchin, J. W., & Hinduja, S. (2010). Cyberbullying and self-esteem. *Journal of school health, 80*(12), 614-621.

Paul, S., Smith, P. K, & Blumberg, H. H. (2012). Revisiting cyberbullying in schools using the quality circle approach. *School Psychology International, 33*(5), 492-504.

Peterson, S. S., & McClay, J. K. (2012). Assumptions and practices using digital technologies to teach writing in middle-level classrooms across Canada. *Literacy, 46*(3), 140-146.

Reid, G. G., & Boyer, W. (2013). Social networking sites and young adolescent identity development. *Childhood Education, 89*(4), 243-253.

Ribble, M. (2008). Passport to digital citizenship: Journey toward appropriate technology use at school and home. *Learning & Leading with Technology, 36*(4), 14-17.

Ribble, M. S., & Bailey, G. D. (2005). Teaching digital citizenship: When will it become a priority for 21st century schools?. Retrieved from www.digitalcitizenship.net/uploads/TeachingDC10.pdf

Roberts, M. A. (2010). Toward a theory of culturally relevant critical teacher care: African American teachers' definitions and perceptions of care for African American students. *Journal of Moral Education, 39*(4), 449-467.

Sadaf, A., Newby, T. J., & Ertmer, P. A. (2012). Exploring pre-service teachers' beliefs about using Web 2.0 technologies in K-12 classroom. *Computers and Education, 59*(3), 937-945.

Sakellariou, T., Carroll, A., & Houghton, S. (2012). Raters of cyber victimization and bullying among male Australian primary and high school students. *School Psychology International, 33*(5), 533-549.

Salajan, F. D., Schonwetter, D. J., & Cleghorn, B. M. (2010). Student and faculty inter-generational digital divide: Fact or fiction? *Computers & Education, 55*(3), 1393-1403.

Sanger, M. N., & Osguthorpe, R. D. (2013). Modeling as moral education: Documenting analyzing, and addressing a central belief of preservice teachers. *Teaching and Teacher Education, 29*(1), 167-176.

Sapouna, M., Wolke, D., Vannini, N., Watson, S., Woods, S., Schneider, W.,…Aylett, R. (2010). Virtual learning intervention to reduce bullying victimization in primary school: A controlled trial. *Journal of Child Psychology and Psychiatry, 51*(1), 104-112.

Sasahara, K., Hirata, Y., Toyoda, M., Kitsuregawa, M., & Aihara, K. (2013). Quantifying collective attention from tweet stream. *PLoS ONE, 8*(4), 1-10.

Serriere, S. (2013). The role of the elementary teacher in fostering civic efficacy. *The Social Studies, 105*(1), 45-56.

Schussler, D. L., & Knarr, L. Building awareness of dispositions: Enhancing moral sensibilities in teaching. *Journal of Moral Education, 42*(1), 71-87.

Shipley, G. (2011). Cyber misconduct, discipline and the law. *Leadership, 41*(1), 14-16.

Snyder, F. J., Vuchinich, S., Acock, A., Washburn, I. J., & Flay, B. R. (2012). Improving elementary school quality through the use of a social-emotional and character

development program: A matched-pair, cluster-randomized, controlled trial in Hawaii. *Journal of School Health, 82*(1), 11-20.

Tan, T. (2011). Educating digital citizens. *Leadership, 41*(1), 30-32.

Tangen, D., & Campbell, M. (2010). Cyberbullying prevention: One primary school's approach. *Australian Journal of Guidance & Counselling, 20*(2), 225-234.

Tapscott, D. (2009). *Grown up digital: How the net generation is changing your world.* New York, NY: McGraw Hill.

Temli, Y., Sen, D., & Akar, H. (2011). A study on primary classroom social studies teachers' perceptions of moral education and their development and learning. *Educational Sciences: Theory & Practice, 11*(4), 2061-2067.

Thompson, M. (2011). Developing moral values in children: Observations from a preschool. *Ife PscyhologIA, 19*(2), 394-411.

Thompson, P. (2013). The digital natives as learners: Technology use patterns and approaches to learning. *Computers & Education, 65*(1), 12-33.

Thorneberg, R. (2009). Rules in everyday school life: Teacher strategies undermine pupil participation. *International Journal of Children's Rights, 17*(3), 393-413.

Topcu, C., & Erdur-Baker, O. (2012). Affective and cognitive empathy as mediators of gender differences in cyber and traditional bullying. *School Psychology International, 33*(5), 550-561.

Vandoninck, S., d'Haenens, L., De Cock, R., & Donoso, V. (2011). Social networking sites and contact risks among Flemish youth. *Childhood, 19*(1), 29-85.

Varela-Candamio, L., Novo-Corti, I., & Barreiro-Gen, M. (2013). Do studies level and age matter in learning and social relationship in the assessment of web 3.0? A

case study for “digital natives” in Spain. *Computers in Human Behavior, 30*(1), 595-605.

Waycott, J., Bennett, S., Kennedy, G., Dalgarno, B., & Gray, K. (2009). Digital divides? Student and staff perceptions of information and communication technologies. *Computers & Education, 54*(4), 1202-1211.

Williams, D. L., Crittenden, V. L., Keo, T., & McCarty, P. (2012). The use of social media: An exploratory study of usage among digital natives. *Journal of Public Affairs, 12*(2), 127-136.

Willems, F., Denessen, E., Hermans, C., & Vermeer, P. (2012). Students’ perceptions and teachers’ self-rating of modeling civic virtues: An exploratory empirical study in Dutch primary schools. *Journal of Moral Education, 41*(1), 99-115.

Wong-Lo, M., Bullock, L. M., & Gable, R. A. (2011). Cyber bullying: Practices to face digital aggression. *Emotional and Behavioural Difficulties, 16*(3), 317-325.

Appendix A

Digital Citizenship

Digital Citizenship Introduction and Consent

1 / 3 33%

The purpose of this qualitative study is to explore elementary teachers' perceptions (K-6) of value and efficacy regarding the instruction of digital citizenship. This study will further seek to explore educator experiences conducive to both positive and negative feelings of value and efficacy related to digital citizenship. The following terms are important for participants to understand:

Digital Citizenship: The use of digital tools in respectful, safe, and productive manners with regard to self and others.

Digital Native: The label given to a person born during a time period of immersion in technology as a means of problem solving, exploring, and living the routine and novel aspects of his or her life.

Self Efficacy: A term used to describe one's personal belief that he or she has the ability to accomplish an identified goal or objective.

By beginning this survey, the participant is providing consent that the data may be used by the researcher.

Next

IMMACULATA UNIVERSITY

Digital Citizenship

Demographic Information

2 / 3 67%

1. School district of employment during the 2014 – 2015 school year (the appropriate selection choice is specifically identified in the email invitation):

- "A" School District
- "B" School District
- "C" School District
- "D" School District
- "E" School District
- "F" School District
- "G" School District

2. Gender

- Male
- Female

3. What best describes your current role?

- Primary teacher (K-3)
- Intermediate teacher (4-6)
- Learning Support (Special Ed., ESL, Gifted Ed, Speech)
- Specialist (Music, Art, PE, Library)
- Specialist (Reading, Math, Coach)

4. Total years of teaching experience.

- ○ Less than 1 year
- ○ 1-5 years
- ○ 6-10 years
- ○ 11-15 years
- ○ 16-20 years
- ○ 21-25 years
- ○ 26-30 years
- ○ More than 30 years

5. Highest level of education obtained.

- ○ Bachelors
- ○ Bachelors +24
- ○ Masters or Masters Equivalency
- ○ Doctorate

6. Have you been involved in any professional learning communities focused on technology?

- ○ Yes
- ○ No

7. Which of the following best describes your technology affiliation?

- ○ I am a **digital native**. I have used computerized devices throughout the majority of my life.
- ○ I am a **digital immigrant.** A large portion of my life did not include computerized devices.

8. What social media services do you use for personal and/or professional purposes? (check all that apply)

- ☐ Facebook
- ☐ Twitter
- ☐ LinkedIn
- ☐ Instagram
- ☐ Pinterest

9. My district utilizes a character education curriculum.

- ○ Yes
- ○ No

IMMACULATA UNIVERSITY

Digital Citizenship

Perceptions of Value and Teacher Efficacy

3 / 3 100%

10. I believe there is a need for elementary schools to teach students how to act as digital citizens.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

11. These digital citizenship competencies have value.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Digital Access: full electronic participation in society	○	○	○	○	○
Digital Commerce: electronic buying and selling of goods	○	○	○	○	○
Digital Communication: electronic exchange of information	○	○	○	○	○
Digital Literacy: process of teaching, learning, and using technology	○	○	○	○	○
Digital Etiquette: electronic standards of conduct or procedure	○	○	○	○	○
Digital Rights and Responsibilities: freedoms extended in the digital world	○	○	○	○	○
Digital Law: electronic responsibility for actions and deeds	○	○	○	○	○
Digital Health: physical and Psychological well-being in a digital technology world	○	○	○	○	○
Digital Security: electronic precautions to guarantee safety	○	○	○	○	○

12. I have taught a successful digital citizenship lesson in following competencies:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Digital Access: full electronic participation in society	○	○	○	○	○
Digital Commerce: electronic buying and selling of goods	○	○	○	○	○
Digital Communication: electronic exchange of information	○	○	○	○	○
Digital Literacy: process of teaching, learning, and using technology	○	○	○	○	○
Digital Etiquette: electronic standards of conduct or procedure	○	○	○	○	○
Digital Rights and Responsibilities: freedoms extended in the digital world	○	○	○	○	○
Digital Law: electronic responsibility for actions and deeds	○	○	○	○	○
Digital Health: physical and Psychological well-being in a digital technology world	○	○	○	○	○
Digital Security: electronic precautions to guarantee safety	○	○	○	○	○

13. I have been provided adequate professional development to teach the following competencies:

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Digital Access: full electronic participation in society	○	○	○	○	○
Digital Commerce: electronic buying and selling of goods	○	○	○	○	○
Digital Communication: electronic exchange of information	○	○	○	○	○
Digital Literacy: process of teaching, learning, and using technology	○	○	○	○	○
Digital Etiquette: electronic standards of conduct or procedure	○	○	○	○	○
Digital Rights and Responsibilities: freedoms extended in the digital world	○	○	○	○	○
Digital Law: electronic responsibility for actions and deeds	○	○	○	○	○
Digital Health: physical and Psychological well-being in a digital technology world	○	○	○	○	○
Digital Security: electronic precautions to guarantee safety	○	○	○	○	○

14. I believe digital communication (voice calls, text messages, social media etc.) influences my students emotionally and/or academically.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

15. I believe my district values the creation of instructional opportunities for students to experience digital citizenship.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

16. A comprehensive character education curriculum includes digital citizenship.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

17. Digital citizenship instruction is more important and/or appropriate for middle/high school rather than elementary school.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

18. I feel confident in helping students solve school conflict that has taken place on the Internet.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

19. I believe I have the ability to create instructional opportunities for students to experience digital citizenship.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

20. I believe I have the ability to create instructional opportunities for students to discuss (not necessarily experience) the characteristics of digital citizenship.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

21. I've been encouraged by colleagues or supervisors to teach lessons that include digital citizenship goals.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

22. I believe parents will support the instruction of digital citizenship at home if they are asked to do so and are provided with the necessary resources.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

23. I have provided instruction that has taught my students how to use Internet tools responsibly and constructively.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

24. My students use technology for learning on a regular basis in my classroom.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

25. When I use technology as a component of my instruction, the focus on the content (math, reading, writing, science/social studies) is reduced.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

26. Professional learning communities and/or professional journals have enhanced my instruction of digital citizenship.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

27. It is likely that my students use digital communication tools at home unsupervised.

○ Strongly Agree ○ Agree ○ Undecided ○ Disagree ○ Strongly Disagree

28. Describe what experiences have created your feelings of self-efficacy regarding the instruction of digital citizenship.

29. Describe what colleagues and administrators have done to support the instruction of digital citizenship.

30. Describe the components of a successful digital citizenship lesson.

31. Describe how digital citizenship benefits elementary students.

32. To the best of your knowledge, describe how your students use technology both in and out of school.

Thank you for participating in this important study. When you click "done" your responses will be submitted. If you are willing to be part of a six question followup interview (approx. 30 minutes), please contact Ryan Berardi at RyanBerardi@gmail.com.

Prev Done

Appendix B

Digital Citizenship Interview Questions
Date:_____
Participant Code:_____

1. Describe possible outcomes that are likely to occur when students are taught how to act as positive digital citizens.

2. Describe the challenges that educators must overcome in teaching digital citizenship.

3. Describe why digital citizenship is, or is not, a valuable use of instructional time at the elementary level.

4. Describe what resources are needed for teachers to feel high levels of self-efficacy in teaching elementary students digital citizenship.

5. Describe a lesson that you have taught, or witnessed, that has provided growth to students as digital citizens.

6. Please share any final comments and/or questions you may have regarding digital citizenship.

Appendix C

IMMACULATA UNIVERSITY RESEARCH ETHICS REVIEW BOARD
REQUEST FOR PROTOCOL REVIEW–REVIEWER'S COMMENTS FORM
(R1297)

Name of Researcher: Ryan Berardi

Project Title: Digital Citizenship: Elementary Educator Perceptions and Formation of Instructional Value and Efficacy

Reviewer's Comments

Your proposal is **Approved**. You may begin your research or collect your data.

PLEASE NOTE THAT THIS APPROVAL IS VALID FOR ONE YEAR **(365 days)** FROM DATE OF SIGNING.

Reviewer's Recommendations:

____ Exempt	__X__ **Approved**
_____Expedited	_____ Conditionally Approve
_____Full Review	_____ Do Not Approve

Thomas F. O'Brien April 20, 2015

Thomas F. O'Brien, Ph.D., Ed.D. DATE
Chair, Research Ethics Review Board