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A Phenomenological Study Exploring the Adoption of Social Networking Platforms to Achieve Digital Literacy for All Learners

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Achieve Digital Literacy for All Learners

by
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An Applied Dissertation Submitted to the
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Abstract

A Phenomenological Study Exploring the Adoption of Social Networking Platforms to Achieve Digital Literacy for All Learners. Anila Sweitzer, 2019: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education and School of Criminal Justice. Keywords: 21st century skills, diffusion of innovation, digital literacy, engagement, IPA, motivation, phenomenon, phenomenological, social media, social networking platforms, and Web 2.0.

The purpose of this proposed phenomenological study was to investigate the perceptions and experiences of teachers, administrators, and instructional technology professionals during integrations of social networking platforms for educational purposes to enhance classroom instruction focused on improved academic achievement and digital literacy. Specifically, the study focused on understanding the experiences of teachers, administrators, and instructional technology professionals within K-12 public school districts responsible for having implemented 21st-century technology skills into classroom instruction with the use of online interviews. This study was grounded on Roger's Diffusion of Innovation Theory as a framework with social networking platforms being the innovation.

The study followed a qualitative phenomenological research design. Data were collected using online interviews and analyzed using Interpretative Phenomenological Analysis (IPA) methodology. The four female participants were educators in K-12 public schools responsible for implementing social networking platforms with ages ranging 40-60. Data were analyzed to answer the central question supported by four subquestions: (1) How do K-12 educational professionals' experiences influence personal beliefs on the integration of social media learning platforms in the classroom?, (2) What are K-12 educational professionals' experiences of professional development received directing the safe and effective application of social media learning platforms?, (3) What are K-12 educational professionals' experiences in the use of social media learning platforms as a tool for digital literacy instruction?, and (4) What are K-12 educational professionals' experiences on the development of safe and appropriate educational use of social media learning platforms policies? The study resulted in nine themes: improving learning experiences, safe social media use, professional development advantage, shift in focus, educator role, development of higher-order skills, digital literacy development, level of educator involvement, and legal and ethical considerations.

This study is important because it promotes discourse in the K-12 educational system to prepare globally competitive adults with appropriate academic and digital literacy skills. The study can serve as a source of information and motivation for K-12 public education professionals to adopt and implement social learning platforms as an educational tool while ensuring the safety of students through development and implementation of clear policies.

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Chapter 1: Introduction

A pressing question at the time of the proposed study was whether the current public educational system in the United States (US) is meeting the 21st-century needs of our ever-changing students to prepare them for an unknown future (Kivunja, 2014; Thornburg, 2012; Wordell, 2014). Two inadequacies of the existing educational system were the inability to meet the basic learning needs of all learners and the kind of learning instilled in students was often restricting due to limited relevance considering real-life needs (Visser, 2015). Due to high exposure to external stimuli from an earlier age through social media and devices (Jacobsen, 2010), students were exposed to more information before formal education process began as compared to students of prior generations (Zimiles, 1982). Students' brains were constantly exposed to multi-tasking (Rheingold, 2010; Sheese, Voelker, Posner, & Rothbart, 2009), resulting in primarily visual learners highly selective with choice of external stimuli presented (Zimiles, 1982). Periáñez and Barceló (2009) emphasized task context is key in dealing with the demands of multi-tasking and motivation to engage with educationally related stimuli.

Post-secondary students reported a preference for use of social media and all other Web 2.0 tools for learning (Abdelmalak, 2015; McArthur & Bostedo-Conway, 2012) despite the higher distractibility caused by use of personal devices (Rheingold, 2010). On the other hand, relevant activities (Keller, 1987b), highly-engaging activities and those related to learner's success resulted in higher on-task behaviors (Chatham, 2015), while targeted electronic media sources can serve as motivational strategies for learners in online college environments (Finamore, Hochanadel, Hochanadel, Millam, & Reinhardt, 2012; Hollister, 2016). Recent policy development had pushed for bans on personal

devices in classrooms (Instructure, Inc., 2016) or social media used among teachers and students in a Kindergarten through twelfth grade (K-12) educational setting (Lieb, 2011), yet the 21st-Century students must be empowered learners, digital citizens, knowledge constructors, innovative designers, computational thinkers, creative communicators, and global collaborators (International Society for Technology in Education [ISTE], 2017).

The research problem. Increase in distance learning (Simonson, Smaldino, & Zvaceck, 2015), blended classrooms (Caravias, 2015), and e-learning (Sharp, 2014) instructional practices make the use of social networking platforms a key component to facilitate delivery of information while supporting the innate social nature of all learners. Social networking platforms enable the development of a community of learners, extending the learning environment while facilitating communication and increasing learner perceptions of teaching and cognitive presence, motivation, and overall satisfaction (Abdelmalak, 2015; Sharp, 2014; Simonson et al., 2015). Simonson et al. (2015) list learning communities and interaction as best practices for distance education, also called guided didactic conversation by Börje Homberg, the developer of the theory of interaction and communication in 1985, making interaction the core of teaching and the reason for increased motivation and participation.

Classroom teachers of all grade levels have the responsibility to engage the minds of students through creative lessons and instructional strategies increasing student's motivation to learn within any setting: online, blended, or traditional (Smaldino, Lowther, Russell, & Mims, 2015). As well, instruction must be relevant (Thornburg, 2012). Abdelmalak (2015) concluded that teachers must use a variety of Web 2.0 tools to expose students to what technology can offer supporting communication. Brain research has

revealed how the attentional mechanisms works, which are responsible for students' attention, motivation, emotions, and short- and long-term memories (Arnsten, 2009; Deco & Rolls, 2003; Immordino-Yang & Singh, 2013; Wagner et al., 1998). Certain situations can trigger emotional responses overshadowing the brain's ability to think critically, resulting in difficulties with problem-solving and retaining of information due to fight-or-flight emotional status (Pawlak, Magarinos, Melchor, McEwen, & Strickland, 2003). The primary attentional mechanism is instinctually biased in responding to external stimuli due to brain's limited capacity (Xia, Foxe, Sroubek, Branch, & Li, 2014). To increase the likelihood preferred stimulus is selected so learners can sustain focus, teachers must learn to advance proper context or relevance (Sheese et al., 2009; Wilson & Korn, 2007).

The Keller ARCS--Attention, Relevance, Confidence, and Satisfaction— Motivational Model (Keller, 1987a) instructs educators to systematically evaluate and adjust instructional materials and practices to learning motivation. This model was revisited by adding volition or self-regulation to the four categories of motivational strategies (Keller, 2008). The Keller model provides strategies to address five categories of motivation involving: attention, relevance, confidence, satisfaction (Keller, 1987a), and volition (Keller, 2008). Dick, Carey, and Carey (2015) connect the ARCS model to the instructional design process, focusing on increasing learner motivation and engagement with learning materials, resulting in higher achievement levels.

One of the ways of motivating students is through high interactivity, connectivity, and communication (Simonson et al., 2015), made possible through the use of social networking. Students are proficient in using social media for multiple reasons (Blair, Millard, & Woollard, 2017; Simonson et al., 2015; Tabari, 2016), preferring teachers to

limit lecturing and provide multimodal lessons preparing students for the future post-educational outcomes like lifelong learning and globally competitive employment (Kivunja, 2014).

Statement of the Problem

Although adults require digital literacy skills to be successful in their personal and professional lives after K-12 graduation, a local, public school system resisted adoption of 21st-century skills integration policies (21st Century Schools, 2017a), specifically pertaining use of social media, denying digital literacy instruction to enrolled students (Lesgold & Welch-Ross, 2012) (Pimentel, 2013) and (Thornburg, 2016). Social media was widely used by students between the ages of 11 and 17 to increase engagement of United Kingdom (UK) student in addition to supporting learning tasks such as homework (Blair et al., 2017). Social media use was found to improve collaborative learning, engagement, and efficiency with research involving postgraduate students, while supporting higher academic performance due to the increased interactions between instructors and postgraduate research students (Al-Rahmi, Othman, & Yusuf, 2015). Abdelmalak (2015), Agosto and Abbas (2016), and Parry (2011) argue social media and other Web 2.0 tools' use are key to teaching digital literacy to students, providing them exposure to what technology can offer. Banning the use of social networking tools or personal devices did not provide students with the necessary direct instruction to learn how to safely use social media for educational, professional, and personal benefits, avoiding its potential risks.

Phenomenon of Interest

With the rise of the Internet, the need for course management systems (Moodle®, Blackboard®, etc.) or learning platforms (Google® Classroom) rose (Sharp, 2014), resulting in the rise of 21st-century tools known as Web 2.0 technologies: wikis, blogs, podcasting, social bookmarking, and social networking (Simonson et al., 2015). Most learners are familiar with social networking platforms (Kivunja, 2015; Lenhart, 2009; Simonson et al., 2015). Social networks provide students with the place to have social presence and interaction, communicating with each other and the instructor, gaining access to multimodal learning materials, and have a social presence: face-to-face or distance learning settings (Abdelmalak, 2015; Bates, 2015; Bentz, 2009; Kivunja, 2015; Speranza, 2014).

Potential risks of using social media were cyberbullying or the ability to easily post negative materials due to anonymity. Based on evidence found on social media of sexual predators in the education system, social media received negative publicity and policymakers rushed to policies discouraging or banning use in the classrooms. Bullying and maladjusted social behaviors like inappropriate teacher-student relationships were not recent human behaviors. Instead, social media provided evidence of unacceptable human behaviors (Wordell, 2014). An additional concern with social media in education was the danger in sustaining a balance between obtaining or maintaining continued employment and private posts of teachers (Belch, 2012; Crompton, Rippard, & Sommerfeldt, 2016). A similar argument was made at the organizational level of dealing with the tension between knowledge management and social media (Ford & Mason, 2013).

The Community of Inquiry (CoI) Model (Bates, 2015) incorporates three elements of presence enabling educational communities of inquiry to exits (Bates, 2015). Yet, educational research was divided on the topic of online interaction. Without a doubt, research showed the existence of technologies like the Internet had and continued to change the learning process especially influencing the younger learners, ages 12-29 years old: the highest users of the Internet (Battalio, 2009). Graham and Dziuban (2008) suggested the need for research to determine the best and most effective use of face-to-face and computer-mediated communication in blended learning conditions.

Visser (2015) suggested the idea of a new horizon of establishing an open world education system. Recent developments in Massive Open Online Courses (MOOCs) easily available on the Internet, disconnected from educational institutions, make the use of social media necessary and crucial in lieu of traditional web-conferencing tools like Blackboard® (Bates, 2015; Simonson et al., 2015). Kim, Lee, Merrill, Spector, and van Merriënboer (2008) predict all learning will become e-learning in the future and instructional technologists will be more concerned with the learning through technology. Most importantly, Open Educational Source (OES) is a worldwide movement (Davis & West, 2014). The new developments in technology support and reinforce educational efforts, enhancing the learning environments (Lowyck, 2014).

Social media use was found useful to make education more accessible, mobile, and supportive of different cultures. However, social media required policy guidelines ensuring possible negative effects are managed (Morgan, 2014; Wordell, 2014). Policy makers did not keep up with technological developments. While teaching digital citizenship was important, there was a need for policy fostering and explicitly setting

strict parameters for appropriate and fair use of social media (Davis & West, 2014; Wordell, 2014).

Background and Justification

Current life needs require highly literate persons in all media type: print or digital. Twenty-first century life demands: education, family support, civic participation, recreation, workplace duties can be met with persons' abilities to utilize reading, writing, and math competencies paired with strong digital literacy skills (Pimentel, 2013; Short, 2012). More than 90 million US adults lack adequate literacy, and only 38-percent of US twelfth graders are at or above proficient in reading (Lesgold & Welch-Ross, 2012). Digital literacy is key to helping underserved learners: English non-proficient, correction system, special needs, and non-graduates become adults unable to utilize digital literacy skills, struggling in personal and professional endeavors. (Lesgold & Welch-Ross, 2012). College and Career Readiness (CCR) standards developed by the United States Department of Education (USDOE) required the states and school districts to meet the digital literacy needs of all learners, especially students underserved. CCR standards incorporated the use of technology tools and multimedia to increase learners' digital literacy making them globally competitive (Pimentel, 2013).

Problem-based learning (PBL) strategies required rich learning environments to provide highly-engaging experiences and situations at low cost, enabling teachers to facilitate higher-order learning to occur through use of technology and multimedia (21st Century Schools, 2017b; Bates, 2015; Bowden, 2015; Davis & West, 2014; Hollister, 2016; Hung, Jonassen, & Liu, 2008; Thornburg, 2016). Currently, classrooms do not meet learners' 21st-century needs (VanKooten & Berkley, 2016; Kivunja, 2015; Smythe,

Toohey, & Dagenais, 2014; Thornburg, 2012). Technological tools can best serve students' educational needs if utilized properly. Students' personal devices can serve as informational tools. With teachers' proper support and direct instruction, students can learn how to use personal devices properly to seek worthy information or network (Smythe et al., 2014; Thornburg, 2012). The altered physical structure of classrooms can support the emotional and motivational needs of the 21st-century learners (21st Century Schools, 2017b; Phillips, 2014; Thornburg, 2016). Furthermore, it is time for teachers to minimize lecturing, presenting, explaining, or telling; embrace new learning environments or paradigms focused on application of learning, critical collection and application of information; and collaborate through complex and digital learning experiences with teachers serving as facilitators of learning (Kivunja, 2015; Thornburg, 2016).

A gradual decrease in funding education resulted in increased class sizes and instructor workload lowering instructors' quality of instructional methods and practices—inflexible teaching strategies focusing on simple transmission of knowledge and lower quality assessments, preparations, and connectivity with students. Teachers were challenged to differentiate instruction for diverse learners to ensure student success, while learning was slowly transitioning to more blended or fully online learning (Bates, 2015; Short, 2012). Orellana (2009) found a weak negative, yet inconclusive correlation between online course class size and level of interactions recommending for further research to examine the relationship between online course size and instructor workload. Students taking online courses placed a high level of importance on student-instructor interactions made possible using technology-mediated communication (Ko & Rossen,

2010; Reisetter & Boris, 2009; Smaldino et al., 2015). The person-centered model required interaction as one of its components to reduce the transactional distance between learners and instructors (Miller & Mazur, 2009).

Social interactions, learner-learner, learner-instructor, learner-content, and learner-interface, are crucial components of learning from a constructivist theory helping learners construct meaning (Bates, 2015; Johnson & Johnson, 2008; Wanstreet, 2009). One way of increasing connectivity and immediacy in learning was to use social media for educational reasons. Social media supported PBL instructional strategies by extending collaborative efforts of learners beyond the physical building structure and designated school times (Davis & West, 2014) facilitating knowledge transfer through personal relationships (Showalter, 2012). Majority of young learners were very familiar with social media because they used it frequently (Lenhart, 2009; Short, 2012). Familiarity increased learner's motivational levels (Keller, 2008; McArthur & Bostedo-Conway, 2012).

On one hand, students expected high teacher digital literacy or use of media, while teachers resisted using social media due to lack of professional development (Fong, 2013; Shao, 2012; Smith & Dobson, 2011), familiarity and competence (Fong, 2013), difficulty of disconnecting from work or teacher workload, possible employment-status complications (O'Connor & Schmidt, 2015), and administration or policy support (Bertini, 2016). Wagner (2008) addressed the implementation of new instructional tools, models, and strategies without teacher and administration professional development. Teachers, especially untenured, found themselves unemployed after school districts terminated contracts based on reviews of teachers' social media use (Belch, 2012;

Crompton et al., 2016; O'Connor & Schmidt, 2015). Multimedia use increased teachers' time efficiency in the implementation of instructional strategies to meet the individual needs of all learners. Yet, public schools in the K-12 educational system were preparing students for the past, the Industrial revolution workplace, rather than teaching the digital generation for the future: 21st-century workplace (Kelly, McCain, & Jukes, 2009; Thornburg, 2016).

Deficiencies in the evidence. A systematic review of literature linking 21st-century skills with the digital skills appropriate for the workplace recommended the need for further research in learners' soft skills: behavioral and non-technical (van Laar, van Deursen, van Dijk, & de Haan, 2017). Social media provides social presence for users when collaborating through media. The intimacy and immediacy increase learners' motivation. Policy was not able to keep up with the extremely fast pace of social media development and use (Davis & West, 2014; Wordell, 2014). Often institutions resisted adoption and educational use of new technologies due to lack of policy and consistent policy implementation, practitioners' training and support, and availability of resources (Shao, 2012). Institutions must adopt diversified strategies to increase the adoption rate of innovations in technology (Penjor & Zander, 2016).

Courses are gradually transitioning to online or blended formats due to the need for differentiation and individualization of learning (Bates, 2015). Learners place a high value on interaction with instructors to gain similar motivation as in face-to-face courses, made possible through technology integration (Reisetter & Boris, 2009). Yet a review of the educational literature found limited research on computer-mediated communication for educational purposes (Wanstreet, 2009).

Short (2012) addressed instructional and assessment strategies in a collaborative digital learning environment, as there was little support given to teachers despite their requirement to adopt technology to teach through digital collaboration. Short (2012) recommended, among others, to conduct further research on professional development by conducting a needs assessment of teacher ability to support collaboration in a digital environment. The skills needed to support collaboration in a digital environment were knowledge of technology use, pedagogical strategies, instructional capacity supporting the development of students' collaborative skills, and instructional design principles for multi-disciplinary context digital collaboration integration (Short, 2012).

Schmidt, Tschida, and Hodge (2016) emphasized the relevance of teacher training for successful implementation of technology into education to ensure instructional practices are engaging and motivating while developing the 21st-century skills of all students. Smith and Dobson (2011) found that preservice teachers did not receive training or experience on the use of Web 2.0 tools for instructional and educational reasons, recommending research to address preservice training to increase the successful implementation of Web 2.0 tools into daily instructional practices.

Hollister (2016) focused on instruction of digital literacy skills through social networking and role playing and influencing learners' motivational levels through information-rich environments. When utilizing social networking, special considerations must be made to cultural and linguistic backgrounds. Also, digital literacy practices were tied to the social contexts within which they were developed and used. A distinction was made between digital literacy practices and digital literacy skills. A person can find through his/her digital literacy practices that he/she lacks digital literacy skills. Hollister

(2016) recommended for research to understand challenges and issues related to digital literacy instruction and development and the ability to transfer these skills to other settings.

Sadaf and Johnson (2017) explored the effect of teachers' beliefs on the classroom implementation of digital literacy integration finding that teachers' beliefs directly influence the use of technology in the classroom. Sadaf and Johnson (2017) found teachers believed that digital literacy integration increases students' engagement levels, and the use of multiple media increased comprehension. Teachers believed that there was a need for digital literacy integration curriculum and professional development and access to successful integration models. Additionally, Sadaf and Johnson (2017) found administrators played a crucial role in the integration of digital literacy instruction by making it a priority and offering support to teachers, while making them feel safe for any downfalls that may occur due to technology use. Sadaf and Johnson (2017) recommended research to find if teacher beliefs on technology integration translate in actual classroom use, and to help with the refinement of teacher preparation and professional development programs with specific interventions aligning with teachers' behavioral, normative, and control beliefs.

Wordell (2014) explored the uses and misuses of social media based on the perceptions of teachers and administrators, specifically pertaining to the legal and ethical considerations of its use. Due to negative publicity, policymakers rushed to write policies that discourage or ban social media use in the classrooms. Wordell (2014) found teachers were afraid of negative consequences resulting from the use of social media, raising questions on the possible factors inhibiting the use of social platforms for educational

purposes. And, the misuse of social media showed higher rates of misconduct because the inappropriate behaviors of few educators were easily traced through social media; lack of district policy to determine what was appropriate social media use behavior, and pre-service training of teachers on the appropriate use of social media. (Wordell, 2014) recommended research to be conducted on social media and inappropriate student-teacher relationships.

Charles (2015) conducted a mixed-methods study using the Keller Model's (2008) strategies across all four categories to improve the engagement and motivation of students with special needs in an alternative school, specifically addressing math instruction to prepare learners to pass their graduation-required state assessments. Charles' study resulted in the increased motivation of students with special needs with math instruction; however, the study did not isolate relevance strategies to determine the effect upon learners' motivational levels.

Audience. Findings are relevant to policymakers, administrators, teachers, and any stakeholders in the public and private sector of the K-12 school system, higher education system, instructional designers and post-secondary education programs.

Purpose of the Study

The purpose of the proposed phenomenological study was to investigate the perceptions and experiences of teachers, administrators, and instructional technology professionals during integrations of social networking platforms for educational purposes: enhancing classroom instruction focused on improved academic achievement and digital literacy. For the purpose of the study, teachers, administrators, and instructional technology professionals were experienced educational practitioners within

K-12 public school districts responsible for having implemented 21st-century technology skills into classroom instruction. Smith and Dobson (2011) found teachers did not receive training on the use of Web 2.0 tools for instructional and educational reasons. Social media use made education more accessible but with a dark side attended by negative consequences requiring management by policy guidelines (Morgan, 2014). The rate of technological advancements made policymakers struggle to keep up with the establishment of guidelines for safe use of technology. While teaching digital citizenship was important, there was a need for policy both fostering and explicitly setting strict parameters for appropriate and fair use of such technology (Davis & West, 2014; Wordell, 2014).

Learners prefer the use of technology and social media for learning experiences, as many already engage social media as the primary way of gaining information (Bates, 2015; Blair et al., 2017; Kivunja, 2015; McArthur, & Bostedo-Conway, 2012; Smith & Dobson, 2011; Vohra, 2016;). Simonson et al. (2015) indicated about 90-percent of teens are active in social networking. By soliciting the insights and beliefs of innovative and successful practitioners within the field, the researcher posited facilitation of a local implementation became plausible.

Definition of Terms

This section provides definitions of important terms helping to understand this study.

21st-century skills. According to Smaldino et al. (2015), provides a definition

by Partnership for 21st-century Skills (Battelle for Kids, n.d.) as including the higher-order skills needed for a student to be successful: critical thinking, communication, collaboration, and creativity.

Adopter Categories. Adopter Categories are based on adoption rates, potential adopters of an innovation are categorized into five categories from highest to lowest adoption rate: innovators, early adopters, early majority, late majority, and laggards (Rogers, 2003).

Diffusion. Diffusion is the process of altering the structure and function of a social system, communicating an innovation through certain channels over time among the members of the social system (Rogers, 2003).

Digital Literacy. Digital literacy is the basic ability to use a computer and office software confidently, safely and effectively; to create and edit images, audio, and video; and to use a web browser and Internet search engines (Department of eLearning, 2015).

Educational Technology. Educational technology, also known as instructional technology, is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources. (Definition and Terminology Committee of the Association for Educational Communications and Technology [DTCAECT], 2008). Instructional technology is the process of integrating tools, resources, and techniques to improve student learning (Smaldino et. al., 2015).

Innovation. Innovation is interchangeably used with technology and is an idea, practice, or object perceived as new by an individual or unit of adoption. (Penjor &

Zander, 2016; Rogers, 2003; Sahin & Thompson, 2006; Shao, 2012; Watts Simonds & Rud, 2016).

Media. Media means of communication carrying information between a source and a receiver with an instructional purpose: text, people, manipulatives, visuals, video, and audio (Smaldino et al., 2015).

Social Media. Social media is interchangeable within the study with social learning, social networking, social platforms, and Web 2.0.

Technology. Technology is "Tools" to get information from the teacher to the learners (Smaldino et al., 2015).

Web 2.0. Web 2.0 differentiates the post-dotcom bubble World Wide Web with its emphasis on social networking, content generated by users, and cloud computing. The 2.0 appellation is used in analogy with common computer software naming conventions to indicate a new, improved version. Web 2.0 includes Twitter, Google® Docs, Skype®, blogs, wikis, Facebook®, Instagram®, Edmodo®, etc. (Smaldino et al., 2015).

Summary

Chapter one revealed the research problem, background and justification, gaps in the literature, conceptual framework, and definitions of key terms pertaining to this study. For the purposes of this study, social media, social platforms, and social networks were used interchangeably to signify the medium facilitating delivery of knowledge and interactivity. Chapter two will provide an in-depth review of the literature, including the conceptual framework, and the research questions.

Chapter 2: Literature Review

Introduction

The following is a comprehensive review of current literature on the topic of digital literacy instruction as it was influenced by the integration of digital collaborative educational tools like social media. Innovations were rejected or resisted by innovations perceived by teachers, administrators, and instructional technology professionals as complex and incompatible with possible negative consequences from the use and adoption (Rogers, 2003). Most higher education institutions relied on traditional learning platforms, not capitalizing on social media benefits (Dabbagh & Kitsantas, 2012) where learners can create their own learning spaces connecting with other learners overcoming geographical and time restrictions (Aifan, 2015). Other factors perceived as influencing the integration of social media platforms for learning, such as professional development or organizational policy were also explored.

The researcher first reasserted the problem to be studied. The purpose of the proposed phenomenological study was to investigate the perceptions and experiences of teachers, administrators, and instructional technology professionals during integrations of social networking platforms for educational purposes: enhancing classroom instruction focused on improved academic achievement and digital literacy. For the purpose of the study, teachers, administrators, and instructional technology professionals were experienced educational practitioners within K-12 public school districts responsible for having implemented 21st-century technology skills into classroom instruction. Next, a conceptual framework upon which the study was constructed will be detailed followed by

an overview of technology and learning as relating to 21st-century career and post-secondary needs.

Conceptual Framework

Rogers' Diffusion of Innovation Theory, reasserted by Hitlin and Olmstead (2018), described the process of adoption of innovations as evidenced in communication through social channels and systems containing five elements: innovation, adopters, communication channels, time, and social system and involving five stages: knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003; Sahin & Thompson, 2006; Shao, 2012). The Diffusion of Innovations Theory is strikingly similar to Bandura's Social Learning Theory (Rogers, 2003). The diffusion of innovations is global, and adoption is dependent on users' perceptions and motivation. Rogers' Diffusion of Innovations Theory explains the rate of adoption: innovators, early adopters, early majority, late majority, and laggards (Penjor & Zander, 2016; Rogers, 2003). Diffusion of Innovations theory applies to a variety of fields over a long historical period: anthropology, sociology, education, public health and medicine, communication, marketing, geography, etc. (Rogers, 2003).

Rogers (2003) defined diffusion as social change involving a special type of communication concerning the innovation or new idea among the members of a social system, also known as the adopters. Adopters' willingness to adopt the new idea depended on how they viewed the change agent or convergence model. A change agent is a potential adopter who shares the innovation with other potential adopters, and the convergence model is about multiple members of a social system creating and exchanging information with each other about the innovation. Change agents are also

referred to as opinion leaders. Diffusion of Innovations Theory developed and revised for the fifth time by Everett M. Rogers (2003) includes four main elements: innovation, communication, time, and a social system.

    Innovation. Innovation is something perceived as new by an individual or unit of adoption. Innovation can be an idea, practice, or object, and the newness of an innovation can be expressed as knowledge, persuasion, or decision to adopt (Penjor & Zander, 2016; Rogers, 2003; Sahin & Thompson, 2006; Shao, 2012; Watts Simonds & Rud, 2016). A technological innovation can be hardware, software, or information such as a philosophical or religious idea. A technological innovation can have advantages and disadvantages. Potential adopters make decisions to adopt or reject a technological innovation based on comparisons of the innovation's ability to solve persons' problem or need and the potential dangers of adopting the technology (Rogers, 2003; Shao, 2012).

    The characteristics of innovations influencing rates of adoption were relative advantages, compatibility, complexity, trialability, and observability (Penjor & Zander, 2016; Rogers, 2003; Sahin & Thompson, 2006). Relative advantage of an innovation is when potential adopters perceive the innovation to be better than its predecessor in terms of convenience, satisfaction, economical, or social status. Compatibility of an innovation is how much adopters perceive the innovation will fit with preexisting values, past experiences, or needs (Rogers, 2003). An innovation's compatibility ranges on a continuum based on the value, experiences, or needs of a social system. If the innovation is incompatible with the norms or needs of the members of a social system, then its adoption will be delayed or blocked. Complexity of an innovation is the level of difficulty the potential adopters perceive the innovation to understand or use. The more

complex an innovation is perceived to be, the lower rate of adoption will be. Trialability is an innovation's potential for adopters to experiment with it on a limited basis. A higher trialability results in higher adoption rates of an invention. Finally, observability is how visible are the results of an innovation to-potential adopters. Observability is also positively related to the adoption rate of an innovation (Penjor & Zander, 2016; Rogers, 2003; Sahin & Thompson, 2006).

Communication. Communication is the process used to create and share information with each other by members of a social system (Rogers, 2003) reaffirmed in the current research by Hitlin and Olmstead (2018). Diffusion is a special case of communication pertaining to innovations (Rogers, 2003). Essentially, a change agent or unit of adoption communicates information to a potential adoption unit on a given innovation through specific communication channels, or means of sending and receiving messages, connecting the two units. In most cases, the change agent has more technical knowledge than potential adopters, causing a problem in the communication between the two (Rogers, 2003; Watts Simonds & Rud, 2016).

Innovation-decision process phases. Time is a variable unique to the Diffusion of Innovation Theory, pertaining to the innovation-decision process, the innovativeness of a unit of adoption, and innovation's rate of adoption within a social system (Hitlin & Olmstead, 2018; Rogers, 2003). During the innovation-decision process, a unit of adoption transitions from knowledge to the decision-making process of adoption or rejection of the innovation. A potential adopter goes through five phases during this process: knowledge, persuasion, decision, implementation, and confirmation (Rogers, 2003; Watts Simonds & Rud, 2016).

During the knowledge phase, a potential adopter is exposed to the existence of the innovation and minimal understanding of its functionality. During the persuasion phase, the potential adopter forms an attitude towards the innovation for or against it (Aifan, 2015; Hitlin & Olmstead, 2018). During the decision phase, the potential adopter makes a choice to adopt or reject the adoption. During the implementation phase, the potential adopter puts the innovation to use, and during the confirmation phase, the individual may either reinforce the decision to adopt or change his/her mind to reject the innovation (Rogers, 2003).

Categories of adopters. Innovativeness is the measure of the time of adoption by the individual or unit of adoption as compared to other members or units of adoption within their social system (Rogers, 2003). In other words, some individuals adopt an innovation earlier than other members of their social system. Using innovativeness, Rogers (2003) categorized the adopters into five groups: innovators, early adopters, early majority, late majority, and laggards (Penjor & Zander, 2016; Rogers, 2003; Sahin & Thompson, 2006; Watts Simonds & Rud, 2016).

Innovators are individuals, groups of individuals, or organizations making up 2.5% of the population of a social system, exhibiting high coping ability levels than other categories of adopters (Rogers, 2003). They actively seek information about innovations, and their network reaches outside of their social system. Early adopters are the second group of a social system comprising of 13.5% of the population who adopt an innovation (Rogers, 2003). Early majority are the third category of adopters making up 34% of the social system population following the lead of the early adopters (Rogers, 2003). The late majority population makes up 34% of the social system population adopting innovations

that are made mandatory or make their responsibilities more efficiently managed (Rogers, 2003). The final group of a social system consists of laggards, making up 16% of the social system population. They only adopt a new technology or an innovation when the old technology is no longer available. (Rogers, 2003). The rate of adoption of an innovation is smallest within the group of innovators increasing within the consecutive groups of adopters, with the largest rate of adoption by laggards. To speed the rate of adoption, agencies have offered incentives: adopter/diffuser, individual/system, positive/negative, monetary/nonmonetary, and immediate/delayed (Rogers, 2003; Shao, 2012).

The rate of adoption. The relative speed of adoption of an innovation by a social system is known as the rate of adoption, starting with a slow increase in the early phases of time, and accelerating as more members of the social system adopt the innovation reaching a slowing down final rate, also known as the saturation, where there are fewer members of the social system left to adopt the innovation (Rogers, 2003). The rate of adoption looks like an S-shaped curve showing different rates of change through different phases of the adoption process. The unit of measure for the adoption rate is the percent of social system population adopting the new technology over the unit of time (Rogers, 2003; Shao, 2012).

Figure (Creative Commons, 2016) below shows the distribution of the categories of the adopters in a bell-shaped curve and the rate of adoption of an innovation is in an S-shaped curve, indicating the initial slow rate of adoption over the first few years, that accelerates when the early and late majority adopters embrace the innovation, reaching a

market saturation when the laggards accept the new technology, as seen by the flattening

of the s-curve towards the end.
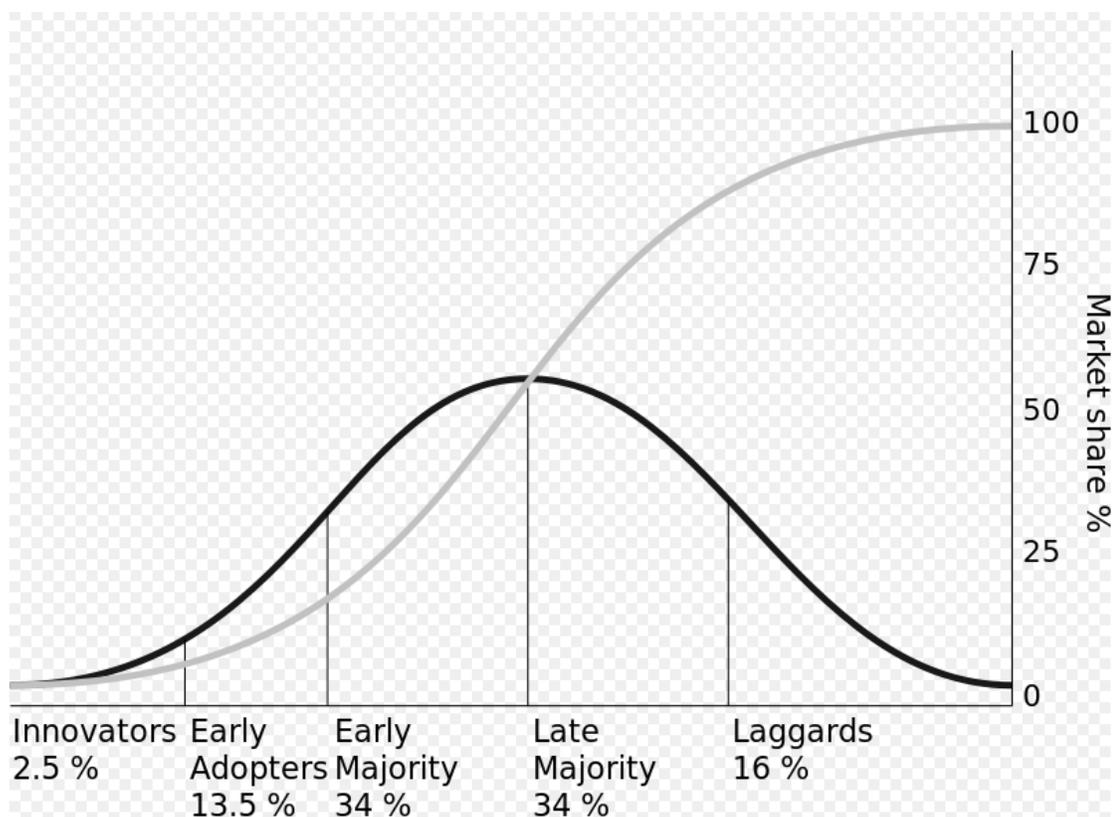
Figure. The diffusion of innovations (Creative Commons, 2016). Market share of an innovation (s-curve) will reach saturation level with its adoption by successive groups of consumers (bell-shaped curve). Retrieved from https://commons.wikimedia.org/wiki/File:Diffusion_of_ideas.svg

Social systems and diffusion of innovation. Diffusion of innovations occurs

within a social system highly depended on its social structures, norms, roles of change

agents or opinion leaders, innovation decisions, and consequences of innovations

(Rogers, 2003). Incompatibility of an innovation with the social system's norms would

block or slow down the adoption of an innovation. Upon the adoption or rejection of an

innovation, there are consequences based on the change that occurs at the individual or

collective levels within a social system, categorized by desirability, directness, and

anticipation levels, respectfully based on functionality, the immediacy of response, and

recognition level (Rogers, 2003). Opinion leaders persuade other members of their social

system by influencing their attitudes and behaviors towards accepting or rejecting the innovation, as they are at the center of the communication networks of the social system controlling the flow of information. Change agents are influential like opinion leaders, but they hold technical and professional positions (Rogers, 2003).

      Organizational innovation. Innovation in an organization leads to its acceptance by individuals as most innovations are adopted at the organizational level. Organizations are a kind of a social system, a group of individuals working together to achieve common goals (Rogers, 2003) reiterated by Hitlin and Olmstead (2018) and Alasfor (2016). An organization has predetermined goals, prescribed roles, authority figures, rules and regulations, and informal patterns. The size of an organization is a convenient and easily measurable variable found to be positively related to an organization's innovativeness (Rogers, 2003). The organizational adoption of an innovation starts with its individual members' adoption influenced by the member's attitudes (Alasfor, 2016).

      Organizational innovation happens in two phases: initiation and implementation (Rogers, 2003). During the initiation phase, all necessary information is gathered to understand and plan the adoption of the innovation. The organization sets an agenda creating a perceived need and matching it with the innovation (Rogers, 2003) later reasserted by Hitlin and Olmstead (2018) and Alasfor (2016). During the implementation phase, the organization focuses on the implementation of the innovation through redefining and restructuring, clarifying, and routinizing by adapting the innovation to fix the context of the organization and later altering of the organizational structure to accommodate the adoption of the innovation. As the innovation is applied by more members of the organization, it is easier understood leading to clarifications of

misunderstandings or unwanted consequences of its use, ultimately leading to the innovation either becoming routine and a normal part of the organization's existence or to its rejection (Rogers, 2003).

Socioeconomic gap and digital literacy. Socioeconomic status was directly related to the degree of innovativeness (Rogers, 2003). In a social system, the members or institutions with better means had the ability and early opportunities to access more information and adopt newer innovations. Their earlier adoptions of innovations resulted in bigger gains or benefits, directly influencing their abilities to get better access to innovations in the future (Borde, 2014; Hitlin & Olmstead, 2018; Rogers, 2003). The converse was also true for those with lesser means, who fall in a downward spiral of ability to access, adopt, or profit from innovations (Rogers, 2003). Borde (2014) found cost to be a significant predictor of an individual's adoption of an innovation. `A socioeconomic gap existed in education affecting learners' digital literacy abilities and access to technology (Short, 2012). The Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS) placed an emphasis on access to technology and the inclusion of digital literacy in the curriculum to ensure all learners, regardless of their socioeconomic levels, have equitable access and digital abilities as adults (Achieve, 2013; Pimentel, 2013; Rogers, 2003; Short, 2012; USDOE 2010; USDOE, 2017b).

Technology and Learning

There is little research on the use of multimedia and motivation (Seel, 2008). In the field of Instructional Technology and Distance Education (ITDE), a lot of attention was paid to learning, media, and use of technology. Clark (2012) debated learning occurs at the same rate despite the choice of technology or medium used as it was dependent on

the content and strategies. Kozma (2012), on the other hand, suggested that more research was needed to understand the role of technology or media in learning.

 To address the increased demands of differentiated and individualized instruction in the teacher evaluation rubrics, multimedia can be used in combination with research-based instructional strategies to plan effective lessons (Smaldino et al., 2015). The International Society for Technology in Education (ISTE) released standards for students, educators, and administrators providing a guide to improve digital literacy of all learners. This professional organization provides innovative ways to infuse technology into instructional practices to achieve the desired learning (ISTE, 2017; Smith, 2017). Social media use was found useful to make education more mobile supporting multicultural collaborative learning (Fandiño, 2013; Kivunja, 2015) becoming a part of the learners' lifestyle with policy guidelines managing possible negative effects (Morgan, 2014). Also, the use of multimodal practices in collaborative settings—instant messages, social networks, digital storytelling, and media redesigning—can help English Language Learners engage in learning and applying the English language with creative manipulation of popular cultures and textual artifacts (Fandiño, 2013).

 Motivation. Neuroscience research had connected attention, motivation, and other emotional responses like empathy to the same area of the brain. Internal motivation, also known as intrinsic or bottom-up, originates within: based on internal values and goals dependent on working memory, long-term memory, and cognitive control responding to external stimuli, while external motivation, also known as extrinsic or top-down, was stimulus-driven often linked to specific modalities, space, and time. The two different kinds of motivation differed in speed and type of response (Chun, Golomb, &

Turk-Browne, 2011; Miller & Buschman, 2013). Another way to categorize motivation was reactive and self-regulative. The reactive motivation was based on fear while the self-regulative motivation was based on effortful control relating empathy. Empathy was developed through socialization making it highly dependent on cultural norms (Posner & Rothbart, 2007).

The manifestation of specific emotions was a result of mixing external stimuli filtering through pre-frontal cortex (PFC) with prior memories in a recipe unique to an individual (Barrett, 2009). Strong feelings of compassion, admiration, and empathy increased one's moral intent to engage in social action and motivation (Immordino-Yang, 2011; Immordino-Yang & Sylvan, 2010). Individual's intense desire to socially survive and flourish had roots in human's original purpose of basic survival (Immordino-Yang & Sylvan, 2010). Chun et al. (2011) contributed to the idea by emphasizing that emotional arousal enhances attention. Additionally, attention and emotions were closely tied to the innate ability of individuals to use imitation and mimicking neurons to learn from others, understand them, and interpret their cultural values (Iacoboni, 2009; Iacoboni & Dapretto, 2006).

Social situations and increased motivation. Posner and Rothbart (2007) connected motivation to effortful control, which was connected to empathy. Empathy was developed through socialization, making it highly dependent on cultural norms. Through culturally-based experiences, children created favorable and non-injurious mental habits helping them socialize successfully. Children's emotions are physiological responses to external stimuli selected by their brain's attentional mechanism influenced by their prior experiences and memories varying based on cultural norms and rules

influencing individuals' levels of empathy and imitation (Barrett, 2009). Introducing strong feelings of compassion or admiration increased moral intent to engage in social action where individuals connected others' experiences to their past experiences leading to increased internal motivation (Immordino-Yang, 2011). Individuals' reactions in a social setting were also influenced by their emotional intelligence. Bar-On, Tranel, Denburg, and Bechara (2003) detailed the components of emotional intelligence necessary for any social situation.

A social situation activates the social joint attention network to guide decisions with rewarding outcomes, especially in adolescents (Oberwelland et al., 2016). Adolescents socialize more forming complex peer relationships making students more sensitive to peer pressure. The acceptance and rejection by peers result in the arousal of affective responses influencing their attention or process feedback (Pfeifer & Blakemore, 2012). Social learning increases the intrinsic motivation in learners who scored high in social relatedness and perceived competency (Kivunja, 2015; Short, 2012). Classroom teachers must activate students' motivation and attention through their planned activities in collaborative groups, especially when teaching adolescents to ensure they master digital skills in a collaborative setting. Social media becomes highly relevant in increasing the motivation of teenage learners, familiar with social media and favor use for personal and learning reasons (Bates, 2015; Blair et al., 2017).

Digital Literacy

Twenty-first Century life demands mastery of digital literacy skills to help individuals, especially at-risk or underserved with future education, family support, civic participation, recreation, workplace duties, and core academic competencies (Kivunja,

2015; Lesgold & Welch-Ross, 2012; Short, 2012). Digital skills are important to individuals wanting to be life-long learners (Fong, 2013). Between 1997 and 2005, the United States Department of Education (USDOE) focused on school access to computers, networks, and the Internet. After 2008, USDOE expanded the focus to include educational technology resources. In 2010, USDOE called for action to reduce the digital divide (USDOE, 2010). Under President Obama, the National Education Technology Plan (NETP) was created to fulfill a vision that by 2020, US would become a leading nation among the developed nations having citizens who are college graduates and globally competitive, possessing technological skills. The development of the CCSS and NGSS intentionally addressed the digital literacy of learners including their abilities to critically evaluate and effectively use information for personal or professional use in any setting or context (Achieve, 2013; Kivunja, 2015; Pimentel, 2013; Sadaf & Johnson, 2017; Short, 2012; USDOE, 2017b).

The Secretary's Commission on Achieving Necessary Skills (SCANS) of the United States Department of Labor reported the necessary skills schools must teach students so they are ready for the workforce, such as competencies: resources, interpersonal skills, information, systems, technology and the foundation: basic skills, thinking skills, and personal qualities. Basic skills necessary for all adults must be proficient in reading, writing, math, speaking, and listening, while the personal qualities include individual responsibility, self-esteem, sociability, self-management, and integrity (SCANS, 1991). American Management Association (AMA) Critical Skills Survey recognized the four critical skills necessary for successful employment: critical thinking, communication skills, collaboration/team building, and creativity and innovation (AMA,

2012). Fandiño (2013) found similar research on the skills needed for learners necessary for their adult-life employment while bringing up cautions found in other research focusing on the true nature of education: lifelong learning. Achieve (2014) survey of 1,347 public high school graduates sheds light on alarming numbers of students who attended two-year community colleges taking remediation courses or quit college before finishing, and the low number of students from minority or low socioeconomic status families. Not all states publicly report career-focused indicators (Achieve, 2016).

Faced with enormous number of adults who were not able to transition to the workplace due to lack of basic academic and digital skills, the federal government focused on digital literacy including the concept in the College and Career Readiness (CCR) standards and multimedia to increase learners' digital literacy making them globally competitive (Pimentel, 2013). The 2014-2018 USDOE strategic plan focused on equity and accessibility, development and continuous improvement of the educational system by accelerating the development and adoption of effective educational technologies (USDOE, 2017b). USDOE was continuously focusing its policy and resources towards creating future-minded schools and had already begun the #Open movement (USDOE, 2017a), a call for school districts or states to progress towards open source education. Social media enables education in open source learning environments to influence learners' motivation, engagement, and academic performance, while benefiting students culturally (Alasfor, 2016; Bates, 2015). Enhancing the efficiency and depth of learning experiences through technology provides learners opportunities to collaborate worldwide breaking geographical boundaries while undergoing rich

educational experiences using project-based learning (Bates, 2015; Kelly et al., 2009; Thornburg, 2016; Wagner, 2008).

Integration of digital media. Social networking sites are beneficial for personal and professional development. Sadaf and Johnson (2017) found teachers believed that digital literacy integration increased students' engagement levels, multiple media use increased comprehension, and administrators played a crucial role in digital literacy instruction integration. Also, there was a need for digital literacy integration curriculum and professional development and access to successful integration models.

Social media can be useful and cost-effective as an alternative for Learning Management Systems (LMS) to facilitate learning (Alasfor, 2016). Learners reported ease of Facebook® accessibility for communication (Sim, Naidu, & Apparasamy, 2014) and sharing of content (Irwin, Ball, Desbrow, & Leveritt, 2012), and use of Wikis increased online discussions among learners (Laughton, 2011). However, its effectiveness was influenced by pedagogical and environmental factors (Alasfor, 2016).

Use of social media (a) made learning flexible overcoming time and geographical barriers, (b) enhanced students' motivation to learn increasing interests on content learned, (c) promoted reflective learning (Alasfor, 2016) by providing learning opportunities from learners' posts, (d) increased engagement due to rapid feedback received (Imlawi, Gregg, & Karimi, 2015; Sim et al., 2014), and (e) influenced learners' interests on the subject through use of YouTube® videos (Lichter, 2012). Although, use of microblogging sites did not provide learners with self-reflective and in-depth thinking (Alasfor, 2016).

Overall, without digital skills, adults are found at a disadvantage making digital literacy highly relevant to educational institutions as the main focus is to prepare college and career-ready graduates (Kivunja, 2015; Pimentel, 2013). Any US learner can gain access to open source courses to improve literacy, professional development, and lifelong learning. Learners preferred the use of technology and social media for learning experiences due to familiarity and social media's features of facilitating information gathering (Al-Rahmi et al., 2015; Bates, 2015; Blair et al., 2017; McArthur, & Bostedo-Conway, 2012; Vohra, 2016), the increased use of mobile devices, and social media's abilities to overcome time and place restrictions (Alasfor, 2016).

Social media's learning benefits have been the primary focus of research studies with a need for research studying its adoption (Alasfor, 2016; Wong, Tan, Loke, & Ooi, 2015). Aifan (2015) found five predictors influencing learners' adoption of social media: perceived ease of use, perceived usefulness, subjective norms, experience, and age. Faculty's age and subject taught were strongly related to the use of social media noting that there is a positive trend in the use of social media for instructional purposes by US faculty in higher education institutions (Seaman & Tinti-Kane, 2013) and in nursing faculty's social media's personal and professional use (Devine, 2015).

Implementation. Twenty-first Century Schools organization (2017a) focuses on structuring the learning environment, instructional practices, and implementation of technology to increase learners' motivation to make learning more interesting and relevant to learners' lives ensuring they gain seven survival skills: critical thinking and problem solving, collaboration across networks and leading by influence, agility and ability, initiative and entrepreneurialism, effective oral and written communication,

accessing and analyzing information, curiosity, and imagination (21st Century Schools, 2017b).

USDOE (2017a) followed suit in supporting the development and expansion of "Future Ready" schools where students' academic and digital literacy skills were a focus and fully integrated. Professional organizations, like ISTE, are dedicated to helping with the safe implementation of technology in education by establishing standards for administrators, teachers, and students involving professionals and businesses in their professional publications and conferences to bring in and disseminate innovative ideas of involving technology use in increasing all learners' digital skills (ISTE, 2017). Smaldino et al. (2015) focused on professional development of teachers in lesson planning to integrate and infuse technology to deepen students' learning and academic performances including Web 2.0 tools, like social networking sites. In all the above-mentioned cases, the focus was on making learners digitally literate, globally competitive as advocated by the CCR standards on digital literacy.

Resistance to social media use. Social media use has been linked to cases of cyberbullying, stress, negative emotional responses, like jealousy or tension with others and reduced privacy and control (Ahn, Bivona, & DiScala, 2012; Fox & Moreland, 2015; Thunman & Persson, 2018). It was the duty of educators to teach students how to safely use their mobile devices and social media for effective and safe learning, communication, and networking (Parry, 2011). The need for professional development of teachers on the safe and effective use of technology, including social media, and integration policies protecting both students and teachers were the next step (Smith & Dobson, 2011; Wordell, 2014). Based on Rogers (2003) Diffusion of Innovation Theory, low

compatibility and high complexity increased the likelihood of educators resisting to adopt innovations, such as social media.

   Social media and pedagogy. Despite some possible negative effects of using social media for educational purposes, the US government promotes its use as an educational tool to achieve college and career readiness and reach proficiency levels of basic academic and digital literacy skills making them globally competitive and successful in their adult personal and professional lives (Bates, 2015; Pimentel, 2013; USDOE, 2017b). Mansfield (2017) found that most first-year college students did not possess the necessary digital literacy to be successful in college, recommending policy changes to address this need. Educators and administrators understood and knew that using social media for education has positive outcomes in students' academic achievement through increased digital literacy (Alasfor, 2016; Wordell, 2014). This study addressed the contributive role of social media to pedagogy focused on increasing student academic achievement and digital literacy.

   Teacher professional development in social media use. Unlike the few educators abusing power and status by pursuing inappropriate relationships with students via social media, most educators wanted to use social learning platforms to build knowledge and appropriate relationships to achieve higher motivation and critical thinking levels. However, school districts must develop the necessary guidelines to explicitly define the boundaries teachers must follow to protect students and train educators regarding social media policy to ensure compliance with use (Wordell, 2014). Alhassan (2017) examined the relationship between teachers' self-efficacy in using Web 2.0 tools and their use in teaching finding them to be strongly correlated indicating the

need for teacher in-service training to expose teachers to the beneficial and safe uses of educational technologies in teaching. Alhassan (2017) recommended for future studies in teacher training on the use of Web 2.0 tools in teaching. This study revealed what professional development was made available for preparing classroom teachers for the use of Web 2.0 tools.

Recurring concerns preventing social media use. Despite the beneficial outcomes of using social media as a platform to increase motivation and academic achievement while addressing 21st-century skills (Ahn et al., 2012; Bates, 2015; Chatham, 2015; USDOE, 2017b), educators shied away from its use even though educators and administrators recognize the beneficial effects of social media use for educational purposes expressing fears of unknowingly crossing the line, keeping educators from utilizing social media as an instructional tool (Wordell, 2014). This study revealed the recurring concerns preventing the use of social media as a communication tool for educational purposes. Other studies indicated concerns about overuse of technological tools causing depression in young adults (Carbonell & Panova, 2017; Oberst, Wegmann, Stodt, Brand, & Chamarro, 2017; Shensa et al., 2017).

Developing social media policy at the district level. A majority of educators wanted to use the best instructional strategies and tools to ensure students acquire life skills like 21st-century skills encompassing academic and digital literacy. Wordell (2014) stated that the misuse of social media showed higher rates of misconduct because the inappropriate behaviors of few educators are easily traced through social media, lack of district policy to determine what is appropriate social media use behavior, and pre-service training of teachers on the appropriate use of social media. This study revealed the steps a

school district can take to determine policy for the safe and appropriate use of social media for educational purposes. Traditional K-12 educational systems were facing new generations of learners already using technology leading to policy development possibly restricting digital literacy development (Ahn et al., 2012). Gillens (2015) discovered that increased social media use by students or educators forced school district boards to create or review and revise their social media use policies. Future qualitative research on social media policies was recommended to determine their effectives in the K-12 educational system.

Methods

Organizational implementation of an innovation starts at the individual adoption of an innovation based on the individuals' personal beliefs (Alasfor, 2016). This cross-sectional descriptive study focused on higher education faculty's attitudes influencing social media adoption for instructional reasons in Saudi Arabia. The 382 participants in this study were higher education instructors from 28 governmental universities in Saudi Arabia. Alasfor (2016) found female instructors were more likely to use social media for instruction than their male counterparts. Additionally, instructors reported the highest mean for the Knowledge stage of Rogers' Diffusion of Innovation Theory and the lowest mean for the Implementation stage regarding using social media for teaching purposes signifying their awareness of social media use for instructional purposes, yet few found themselves implementing social media. Rogers' Diffusion of Innovation Theory identified five perceived characteristics—relative advantage, compatibility, complexity, trialability, and observability—influencing persuasion stage of adopting an innovation.

Alasfor (2016) found relative advantage and compatibility were strong predictors for higher education instructors in Saudi Arabia to adopt social media for instructional purposes, with compatibility and relative advantage being significant predictors for male and female instructors respectively. Age and gender of instructors were found not to be significant predictors in their decision to adopt social media for instructional purposes. The open-ended questions of the survey were only answered by 46 participants identifying factors that influenced their decisions to not use social media for teaching: time-consuming task (28%), complexity (10.8%), instructor's lack of knowledge of its benefits (8.7%), social media's inefficiency (21.7%), inappropriateness for the course (17.3%) and undergraduate students (2.1%), lack of control (15.2%), lack of instructor qualifications to use social media for teaching (4.3%), lack of need for its use (2.1%), possible legal issues (4.3%), bad Internet service (8.6%), and existence of LMSs (13%). One of the recommendations for future studies asked for the use of interviews to obtain rich information from university professors who have different intentions of using social media for instructional purposes (Alasfor, 2016). Alasfor (2016) focused primarily on the higher education system, leaving out the K-12 educational system implementation of social media. This study explored experiences and perceptions of K-12 educational professionals on the phenomenon of social media implementation to increase digital literacy.

Alhassan (2017) examined the relationship between teachers' self-efficacy in using Web 2.0 tools and their use in teaching. Alhassan (2017) conducted a descriptive quantitative study using a questionnaire to collect data from 628 public school educators in Saudi Arabia finding that 18% of teachers indicated using blogs in teaching, 82% of

teachers used or referred their students to wikis, and 65% of teachers used social media in general weekly. Interestingly, teachers expressed fears of using social learning platforms as learning tools, and they reported being discouraged from using social media by school administrators. Alhassan (2017) found that 87% of teachers referred their students to multimedia websites, like YouTube®, with podcasts being the least used tools in learning due to lack of teacher training. Overall, the students used social media to obtain information without actively producing any educational product to increase both academic content knowledge and digital literacy. Alhassan (2017) found three factors having a strong correlation to the use of Web 2.0 tools in teaching: self-efficacy, teacher training, and experience in using the tools. Availability of the tools and teacher training increased teachers' self-efficacy resulting in the use of educational technologies in teaching. Alhassan (2017) recommended future studies on the impact of e-training as professional development for teachers to learn how to use Web 2.0 tools in teaching. Additionally, Alhassan (2017) recommended the development of clear policies for the use of social media in teaching.

Cortez-Riggio (2014) conducted an ethnographic study with fifth-grade students participating with parental permissions in a closed digital space to communicate and collaborate developing social, ethical, and moral cyber citizenship guidelines against cyberbullying. Cortez-Riggio (2014) utilized multiple types of data: blog entries, observations, and questionnaires with 20 fifth-graders who blogged anonymously on the topic of cyberbullying, and a focal group with five students selected for one-to-one interviews. Cortez-Riggio (2014) used blogging to develop students' digital literacy, civic responsibility, communication, and writing skills. Utilizing social platforms for learning

provided young learners the necessary practice of academic skills, while developing civic responsibility and cyber citizenship enabling students to connect globally (Cortez-Riggio, 2014). Cortez-Riggio (2014) recommended research on the important role of digital media in education to address the creative learning needs of young students through improved pedagogy.

Wordell (2014) conducted a case study examining the perceptions of eight experienced high school educators on the uses and misuses of social media to help in the development of effective social media policy to guide the practices of educators. The initial 96 educators answered a survey with two open-ended questions to qualify as participants of this study. An interview was conducted with the participants via phone, email, or in-person regarding legal and ethical issues pertaining to the safe use of social media with students at the high school level. This study's participants were 50-percent administrators and 50-percent teachers. Wordell (2014) identified four emerging themes: (a) importance of teacher-student relationship, (b) appropriate and inappropriate use of social media, (c) legal and ethical concerns, and (d) components of social media policy. Wordell (2014) emphasized the need for sound ethical guidelines to encourage the appropriate and ethical use of social media in teaching recommending for additional research to discover which components of existing social media policies in schools are effective, and which are not effective. Wordell (2014) recommended for an additional study consisting of an analysis of how social media is used by schools and the safety of the people who use it. Wordell (2014) focused primarily on the high school level. However, the effective and safe use of social learning platforms in teaching encompasses

all educational levels. Additional lines of communication, especially in the K-12 educational system, include teacher-parent communication.

Research Questions

The central research question and the four sub-questions were designed to investigate the experiences of K-12 educational professionals on the integration of social networking platforms for educational purposes of enhancing classroom instruction focused on improved academic achievement and digital literacy. For the purpose of this study, the term K-12 educational professionals included K-12 teachers, administrators, and instructional technology professionals.

Central research question. What are K-12 educational professionals' perceptions and experiences during integrations of social media learning platforms for educational purposes: enhancing classroom instruction focused on improved academic achievement and digital literacy?

Four subquestions were used to answer the central research question.

1. How do K-12 educational professionals' experiences influence-personal beliefs on the integration of social media learning platforms in the classroom?

2. What are K-12 educational professionals' experiences of professional development received directing the safe and effective application of social media learning platforms?

3. What are K-12 educational professionals' experiences in the use of social media learning platforms as a tool for digital literacy instruction?

4. What are K-12 educational professionals' experiences on the development of safe and appropriate educational use of social media learning platforms policies?

Summary

Chapter two presented a review of literature serving as the rationale for this study. The review of literature focused on the theoretical framework, social media in education, digital literacy, motivation, current policy in education, and problems in the implementation of social media as learning tools or educational technology. Chapter three will focus on the methodology of the study.

Chapter 3: Methodology

The aim of the proposed phenomenological study was to investigate the perceptions and experiences of teachers, administrators, and instructional technology professionals during integrations of social networking platforms for educational purposes: enhancing classroom instruction focused on improved academic achievement and digital literacy. For the purpose of the study, teachers, administrators, and instructional technology professionals as experienced educational practitioners within K-12 public school districts were responsible for having implemented 21st-century technology skills into classroom instruction. Chapter three describes the study's design, participants, instruments, procedures for data collection and analysis, and ethical considerations of the study. The study addressed one central research question with four subquestions.

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3. What are K-12 educational professionals' experiences in the use of social media learning platforms as a tool for digital literacy instruction?

4. What are K-12 educational professionals' experiences on the development of safe and appropriate educational?

Qualitative Research Approach

Phenomenological research is a form of qualitative research design focusing upon the common meaning of a group of people based on lived experiences during the collection of data from multiple sources on the identified phenomenon and the development and reporting of a composite description of all participants' common experiences at the core (Creswell, 2018). The proposed study attempted to understand the common experiences of teachers, administrators, and instructional technology professionals pertaining to the implementation of 21st-century technology skills into classroom instruction. Phenomenological methodology was appropriate to understand the common experiences teachers, administrators, and instructional technologists have had in the implementation of social learning platforms into the classroom instruction to increase students' digital literacy skills (Alhassan, 2017).

Review of past studies recommended a more in-depth study into the experiences of professionals directly involved in the integration of digital literacy instruction. For instance, Alasfor (2016) studied the organizational implementation of an innovation using cross-sectional descriptive study focused on higher education faculty's attitudes influencing social media adoption for instructional reasons in Saudi Arabia higher education system. Recommendations for future studies asked for the use of interviews to obtain rich information from university professors having different intentions of using

social media for instructional purposes (Alasfor, 2016). In addition, Alhassan's (2017)

descriptive quantitative study examined the relationship between teachers' self-efficacy

in using Web 2.0 tools and elective use in teaching finding teachers expressed fears of

using social learning platforms as learning tools. Alhassan (2017) reported administrators

discouraged teachers from using social media recommending future studies on the impact

of e-training as a form of professional development for teachers to learn how to use Web

2.0 tools in teaching and the development of clear policies for the use of social media in

teaching. Within the study, e-training was operationally defined as training offered online

rather than face-to-face.

Cortez-Riggio (2014) conducted an ethnographic study with fifth-grade students

participating in a closed digital space to communicate and collaborate to develop social,

ethical, and moral cyber citizenship guidelines against cyberbullying. Cortez-Riggio

(2014) recommended for research on the important role of digital media in education in

addressing the creative learning needs of young students through enhanced pedagogy.

Wordell (2014) undertook a case study examining the perceptions of eight experienced

high school educators on the uses and misuses of social media to help in the development

of effective social media policy to guide the practices of educators. The study emphasized

the need for sound ethical guidelines to encourage the appropriate and ethical use of

social media in teaching recommending for additional research to discover which

components of existing social media policies in schools are effective and ineffective. A

recommendation was made to conduct an analysis of how social media is used by

schools. The collective studies supported the need for exploring in-depth the experiences

of professionals in education who have been involved in the implementation of social learning platforms for increased digital literacy instruction.

Participants

The proposed phenomenological study planned to target teachers, administrators, and instructional technology professionals in the public-school setting responsible for having implemented 21st-century technology tools and skills into classroom instruction. Due to the nature of the proposed study, the number of participants was small and selected through purposeful sampling (Emmel, 2013; Smith, Flowers, & Larkin, 2009) to inform understanding of research problem of this phenomenon (Creswell, 2018).

Recruitment. The selection criteria for participants were to include adults of either gender serving as teachers, administrators or instructional technology professionals in the public K-12 education system having implemented 21st-century technology skills into classroom instruction ensuring all had experiences with this common phenomenon. After Institutional Review Board (IRB) approval letter was obtained from Nova Southeastern University (NSU), a formal IRB request was submitted to the Association for Educational Communications & Technology (AECT) to solicit members to participate in this study. The target population was reached through an email outreach distributed to all educational professionals as AECT members. The researcher contacted AECT by emailing the Executive Director of AECT providing a brief description of the study, including purpose and intended participants, researcher's contact information, start and end dates of the study, survey link including the electronic consent form link, and NSU's IRB approval letter requesting to contact all AECT members determining eligibility within the study enlisting participation.

Once IRB approval was granted from AECT, the researcher's message was disseminated to all members including a link to the study participant identification survey. Initially, potential participants were provided with a brief description of the study followed by a request to elect participation through the completion and return of a consent form. Fifty-five participants responded to the participant identification survey selecting identifiers ensuring each qualified for this phenomenological study. Ten AECT members were educational professionals of both genders serving as educational professionals actively involved in the use of instructional technology within the classroom. Demographic information for each of the ten participants was collected using the Participant Identification Survey once they qualified for the study. All qualifying participants with initial consent were contacted by email messages to schedule an interview using GoToMeeting®. Only six of these qualifying participants confirmed they were willing to participate in the study. A confirmation email message was sent to all confirmed participants. The rest of the qualifying participants were contacted multiple times through their provided email resulting in no responses. All request attempts were halted after the third attempt in reaching the qualified participants.

After consenting, the six qualifying participants were asked to provide the researcher with contact information to arrange an interview using GoToMeeting® requiring one interview session with the consenting qualified participant lasting up to two hours. The researcher sent an email message to participants requesting to make interview arrangements. The interview protocol (see Appendix A) was attached to the email message for the participant to review prior to the interview. The message ensured the participant felt free to withdraw from participating in the study at any point. Two of the

qualifying participants withdrew at this point: one withdrew because she lived outside of the United States and the other participant could not participate through GoToMeeting®.

Participant demographics. All four consenting participants were females with ages ranging from 41-60. These participants were all full-time educators serving as teachers, instructional coaches, and former-administrators in the public K-12 educational system schools at different grade levels throughout this study and their careers holding multiple college degrees with the highest degrees ranging from masters to doctoral degrees.

Data Collection Tools

To address the central question and four subquestions of the study, a participant-identification survey and interview protocol was developed and validated by the researcher. In qualitative research, the measurement tool must be valid. To be valid, the instrument must measure for intended purpose, have trustworthiness, and data harvested must have rigor and quality (Edmonds, & Kennedy, 2013). Marshall and Rossman (2016) provide a list of strategies to establish validity and reliability of an instrument used in qualitative research.

To establish the validity and reliability of the study's instruments, the instrument was evaluated by an expert panel and beta tested. The data-collection tool was evaluated by experts selected by the researcher based on their detail-oriented nature, knowledge in research, or professional experience similar to future participants. Experts secured for the evaluation process of the tool developed by the researcher were teachers and doctoral candidates. The interview protocol was sent to the experts as an attachment to an email message asking for constructive feedback to validate the instrument. As an original

instrument, the audience will want a reasonable explanation as to how the determination of validity was made with open-ended questions to collect relevant data, clustered in groups, with a brief introduction or transition for each cluster, providing definitions of key terms used in the questions of the instruments. Each expert reviewed the protocol and provided constructive feedback via email to improve the instrument. After revising the instrument based on the expert panel's feedback and to further improve the validity and trustworthiness of the instrument, the researcher ran two mock interviews as a pilot study to ensure the questions in the instrument obtained relevant information answering the central question and the four subquestions of the study. The pilot study served as a trial run for the researcher allowing the researcher to take notes on what must be edited. After the instrument was revised, the data collection tool underwent one final pilot study to ensure its trustworthiness.

Procedures

After the instrument was revised based on feedback from the expert panel review and pilot studies to increase validity and trustworthiness, the researcher applied to obtain IRB approval from NSU to conduct this study. After obtaining IRB approval from NSU, the researcher applied for AECT's IRB approval by emailing the Executive Director of AECT with a brief description of the study, including its purpose and intended participant population, researcher's contact information, start and end dates of the study, participant identification survey link including the electronic consent form link, and NSU's IRB approval letter requesting to contact all AECT members determining eligibility of participants within the study enlisting their participation. The researcher is an AECT member. Upon granting of IRB approval for this study, as a member benefit, AECT

informed all its membership of the study providing a brief description of the study, the participant identification survey link, and the electronic consent link.

Participants were identified using a screening tool ensuring each is an educator or policy maker involved in the use of instructional technology in the classroom while collecting demographic information for each participant. Upon qualification, the participants provided consent by reviewing the consent form and clicking on a link stating, "Yes, I agree to participate in this study." After consenting, participants were asked to provide the researcher with contact information to arrange a single interview with each participant using GoToMeeting® requesting up to two hours of participant's time. Researcher contacted the participants using an email message including the interview protocol for review prior to the interview requesting for a date and time for the interview. At the agreed upon date and time, the researcher contacted the participant using GoToMeeting® as the platform to conduct the interview. The participants were advised responses would be recorded, transcribed, and analyzed.

The interview was recorded using GoToMeeting® and transcribed by the researcher into a Microsoft Word® document while listening to the recorded interviews, keeping each interview transcripts in separate documents. The researcher codified transcripts using generic names, such as Participant A, Participant B, etc., to protect the identity of each participant and store information in a Microsoft Word® document. Interview documents were stored in the researcher's private, password-protected laptop and were kept in a secure location at the researcher's residence.

Member checking is a strategy ensuring validity and reliability and establishing the trustworthiness of the instrument ensuring the transcripts have accurate information

(Marshall, & Rossman, 2016). Each transcript was provided as an attachment to an email message to the corresponding participant requesting for verification, clarification, redactions, or editing of statements to ensure the information was accurate according to the participant. Each participant was asked to resend the final transcript with any changes to the researcher as an attachment to an email message. Although all participants' feedback would be accepted to ensure the transcripts reflect individual thoughts, feelings, beliefs, and experiences accurately, none of the participants made any changes to the transcripts. In cases when the participant did not respond to the email message, the researcher sent a second email message requesting the non-responsive participant to respond. When the additional attempts failed to reach the participant, the original transcribed responses were used for data analysis. Throughout the entire process, participants were reminded participation was voluntary being able to remain committed to participate or withdraw from the process at any time.

Data Analysis

The researcher utilized Interpretative Phenomenological Analysis (IPA) methodology to analyze the transcripts identifying three types of comments: descriptive, linguistic, and conceptual. Descriptive comments describe the content of the data, while linguistic comments note any emphases on words or phrases or changes in tone, pace, or volume level. After descriptive and linguistic comments are recorded, the researcher transitions to conceptual comments as the initial phase of identifying themes (Smith et al., 2009). Smith et al. (2009) recommend using Comment balloons to keep track of researcher's personal thoughts and beliefs about the issues discussed in the interview as a form of bracketing while maintaining a journal throughout the entire process.

Smith et al. (2009) prescribe a plan for IPA. Operationally, the researcher followed the prescribed plan for IPA. The researcher listened to and transcribed the interview recordings into a Microsoft Word® document saving the document using a code name. Each transcript document will be formatted in a two-column view. The transcript was on the left column and the comments were on the right column, while bracketing was kept using comment bubbles.

During the first-cycle analysis, the researcher listened to the interview recordings and read the transcripts multiple times before and during the analysis phase, marking a single type of comment each time. Microsoft Word® document review features, such as highlighting to color code text and comment balloons, were used. Descriptive text and comments were highlighted in teal color and coded with the letter D followed by a number (i.e. D1, D2, D3, etc.) in order of appearance in the transcript along with the date they were recorded. The linguistic text and comments were highlighted in yellow and coded using the letter L followed by a number (i.e. L1, L2, L3, etc.) in order of appearance in the transcript based on words or recording along with the date they were recorded.

After descriptive and linguistic comments were recorded, the researcher transitioned to conceptual comments as the initial phase of identifying themes using gray color and the letter C followed by a number (i.e. C1, C2, C3. etc.). All identified comments were grouped for each subquestion and each participant for analysis. Emergent themes were statements developed by the researcher based on clusters of comments to make meaning of all clustered comments using abstraction by identifying patterns (Smith et al., 2009). The themes emerging from Participant A transcript analysis were supported

by descriptive, linguistic, and conceptual comments and organized in a table using

Microsoft Excel®. The process was repeated for all participants' interviews for each

subquestion. Emerged themes for all participants were organized by subquestion in a

table to identify common recurrent themes for each subquestion across all participants'

data analysis using Microsoft Excel® resulting in final themes. The final themes (see

Appendix B) were organized with supporting evidence: emergent themes.

Throughout the process, the researcher recorded and bracketed personal thoughts

and beliefs to ensure data analysis did not project personal thoughts, beliefs, or biases

into answering research subquestions. Also, the researcher maintained a journal using

Microsoft Word® as prescribed by Smith et al. (2009) to increase validity of the data

analysis process.

Ethical Considerations

All participants were provided with clear communication on the nature of the

study, with the researcher's commitment to unbiased and non-judgmental participation.

The researcher provided clear communication of the commitment to each participant's

privacy by protecting identities with coded names. All participants' responses were stored

in the researcher's private password-protected computer of the researcher at a secure

location in the researcher's private residence.

Participants were reminded throughout the entire process withdrawing or

remaining in the study was voluntary. Also, participants were asked to arrange the

GoToMeeting® interview at a desired date and time. Each interview began with an

explanation of the process to put the participant at ease clarifying any terms used

throughout the protocol. Additionally, the researcher began by asking the participants to talk about themselves ensuring comfort to share information with the researcher.

Trustworthiness

Creswell (2018) strategies, such as the use of an expert panel and piloting the instrument guarantee the trustworthiness and validity of the instrument ensuring relevant information to answer the central research question and the four subquestions. To ensure the information obtained from the interview was accurate, member checking strategy was used (Creswell, 2018). Each participant received a copy of own transcript as a member checking strategy to allow the participant to confirm or edit the transcript for clarification and accuracy of information. None of the participants made any changes to the original transcripts.

Potential Bias

The researcher is an educator in the K-12 public education system who has actively used technology for educational purposes and has served as a classroom teacher and administrator in the public K-12 educational setting in all three levels: elementary, middle, and high school. The researcher has mainly used social media for personal use. With the recent transition to Google® schools, the researcher has used Google® products, such as Google® Classroom, Google® Docs, and Google® Drive as social learning platforms for educational purposes. The researcher is a strong supporter of the increased efforts in public education to improve students' digital literacy. To address the researcher's personal biases, the researcher used journaling and bracketing throughout the research process to reflect on actions pertaining to this study to minimize bias and increase the validity of the data (Smith et al., 2009).

Limitations

      The proposed study explored the experiences of educational professionals with experience in the use of social media learning platforms for classroom instruction in the public K-12 educational setting. As a result, the findings of the study will apply to a particular setting. Additionally, the study had a small, yet appropriate sample size for the particular qualitative study. Although the sample size was small, it was appropriate for the proposed study. And the sample only represents a small part of the whole population.

Summary

      The actions required for the conduction of this proposed phenomenological research study were presented in the methodology chapter. The methodology chapter narrative included the proposed design, participants, data collection tools, procedures for data collection and data analysis, and ethical considerations for this research study. Chapter four will focus on the findings of this qualitative phenomenological study.

Chapter 4: Findings

Introduction

Chapter four presents the findings of a qualitative phenomenological conducted to investigate the perceptions and experiences of K-12 public education professionals during integrations of social networking platforms for improved academic achievement and digital literacy. For the purpose of the study, educational professionals were teachers, administrators, and instructional technology professionals within K-12 public school districts responsible for having implemented 21st-century technology skills into classroom instruction.

Description of data collection process. After obtaining formal IRB approval from Nova Southeastern University (NSU), the researcher recruited participants using a message with participant identification survey through Association for Educational Communications & Technology (AECT) meeting the criteria of (1) being educational professionals, (2) working or having worked in Kindergarten through 12 (K-12) public education system, and (3) implemented social learning platforms or social media for learning. After returning the signed consent form, researcher contacted participants using the interview email invitation and interview email confirmation to request and confirm an online interview using GoToMeeting® at the participant's desired date and time. Participants were interviewed online using GoToMeeting® using the interview protocol (Appendix A). Audio-recorded interviews were downloaded into the researcher's password-protected private laptop stored in a secure area.

Description of data analysis process. Each interview was recorded using GoToMeeting® and transcribed by the researcher into a Microsoft Word® document

while listening to the recorded interviews, keeping each interview transcripts in separate

documents codifying transcripts to protect the identity of each participant and store

information in a Microsoft Word® document. Interview documents were stored in the

researcher's private, password-protected laptop, and kept in a secure location in the

researcher's private residence. Each transcript underwent member checking process to

ensure validity and reliability and establishing the trustworthiness of the instrument

ensuring the transcripts had accurate information (Marshall, & Rossman, 2016). All

original transcripts were used for the data analysis process after approved by participants.

  The researcher utilized Interpretative Phenomenological Analysis (IPA) (Smith et

al., 2009) methodology to analyze the transcripts identifying three types of comments:

descriptive, linguistic, and conceptual. Comment balloons were used to keep track of

researcher's personal thoughts and beliefs about the issues discussed in the interview, as a

form of bracketing. Throughout the entire process, the researcher maintained a journal

using Microsoft Word®.

  To analyze the data, researcher used the Smith et al. (2009) prescribed IPA plan.

The researcher listened to the interviews and read the transcripts multiple times before

and during the analysis phase, to first obtain a general sense of the material, then to

marking a single type of comment each time, using Microsoft Word® document review

features of highlighting text to color code and comment balloons. All identified

comments were grouped for each subquestion and each participant for analysis. The

themes emerging from analysis of each transcript were supported by descriptive,

linguistic, and conceptual comments and organized in a table using Microsoft Excel®

using abstraction (Smith et al., 2009). Emerged themes for all participants were organized

by subquestion in a table to identify common themes for each subquestion across all participants' data analysis using Microsoft Excel® resulting in final themes. The final themes were shown with supporting evidence. Throughout the process, researcher recorded and bracketed personal thoughts and beliefs eliminating their projection onto the data analysis findings.

Chapter four is organized in terms of the four subquestions posed at the end of the literature review, discussing (a) participant summaries, (b) findings, and (d) summary. This phenomenological study was guided by the following central research question: What are K-12 educational professionals' perceptions and experiences during integrations of social media learning platforms for educational purposes: enhancing classroom instruction focused on improved academic achievement and digital literacy?

Four subquestions were used to answer the central research question.

1. How do K-12 educational professionals' experiences influence personal beliefs on the integration of social media learning platforms in the classroom?

2. What are K-12 educational professionals' experiences of professional development received directing the safe and effective application of social media learning platforms?

3. What are K-12 educational professionals' experiences in the use of social media learning platforms as a tool for digital literacy instruction?

4. What are K-12 educational professionals' experiences on the development of safe and appropriate educational use of social media learning platforms policies?

Participant Summaries

To explore the experiences of educational professionals with experience in the use of social media learning platforms for classroom instruction in the public K-12 educational setting, a phenomenological approach was chosen. Phenomenological methodology was appropriate to understand the common experiences teachers, administrators, and instructional technologists have had in the implementation of social learning platforms into the classroom instruction to increase students' digital literacy skills (Alhassan, 2017). All participants in the interviews of this study were educators in the K-12 public education setting. Four one-on-one interviews were conducted with the four participants using GoToMeeting®, with each interview session lasting for up to two-hours. Since the research subquestions explore the educational professionals' personal perspectives based on their experiences with implementation and policy pertaining use of social learning platforms in classrooms, identities were protected using uniquely-coded identifiers. The following are profiles of each of the four participants. The profiles are offered to provide some relevant background information, serving as context of their perceptions and experiences.

Participant A. Participant A was a female teacher, age group 51-60 in the state of Nevada. Having taught for 19 years, the participant currently held four college degrees: two baccalaureates, one master, and a doctoral degree. Participant A currently teaches a blended classroom in Grades 3-5, had served as an education coordinator for the Department of Natural Resources in Georgia, and was a park ranger until deciding to teach full time, 19 years ago. Participant A used social media as a learning tool in classroom instruction almost daily, trained teachers to cooperate social media in

classrooms, and had recently served as the lead teacher for own school's Blended Academy. Personally, Participant A used technology daily for personal and professional reasons. She expressed:

> I would say, social media are an integral part of my professional and my personal life. I use it almost on a daily basis. I am working with the social media in my classroom. I train our teacher to incorporate it into their classrooms as well. And then personally, I'd say I'm on my computer most of the day. This is the first year that I've actually gone completely digital with my class using the social media platforms for students to post and share ideas. We have Socratic discussions. Last year and the year before, myself and another teacher were the Blended [Academy] coaches for our school, trying to get our teachers to integrate technology and social media into their classrooms to help them teach more effectively. This year, I'm actually the Lead Teacher for the Blended Academy, which is our multi-age group. So, I sat with our administration and came up with the program, curriculum, and what social media components we would be applying with each grade level.

Participant B. Participant B was a female teacher, age group 41-50 in the state of Indiana. Having taught for 21 years, the participant held two college degrees: a baccalaureate, a master, and a certificate in Instructional Systems Technology. Participant B had been a high school business teacher and served as a department chair. Throughout the 21 years in teaching, the participant had taught Keyboarding and Computer Applications, Computer Programming, Digital Applications, Interactive Media, Web Design, PE and Health, and was the digital yearbook editor and advisor. Participant B

managed school's website and social media accounts: Facebook®, Twitter, and Instagram® and served in the school's technology team offering guidance on technology use and implementation while also using social media for personal and educational reasons frequently. She stated:

> I'm going to start with personal use. I use Facebook®. I'm not one of those huge Facebook® users, but I use it to keep up with family who's out of town. And I use Twitter, mostly as an educational tool. I follow Indiana Department of Education and different educational agencies. As far as professionally, we use the LMS Canvas®…for all my classes. And then, I am our school's web manager, so I use a lot of social media. As a team member, I do the web stuff, the content that sticks around a little longer, and my partner does all Twitter, Instagram®, and Facebook®. And then, when I was our yearbook advisor, we used Pinterest®. We use a Pinterest® board before we had Canvas® to share our ideas and keep everybody on track. I am also our Business Professionals of America sponsor, and we use Twitter, Facebook®, and Canvas® to inform the public about our activities and keep all of our members aware of events and deadlines. I'm also on our school's technology team. We were able to kind of offer guidance in which social media to use and give students access to.

Participant C. Participant C was a female Science Technology Engineering Art and Math (STEAM) facilitator for students in Grades 3-5, and a teacher for the gifted and talented program, age group 51-60 in the state of Idaho. Having taught longer than 25 years, the participant held three college degrees: a baccalaureate in elementary education, a masters in curriculum and instruction, and a doctoral degree. Prior to teaching gifted

and talented elementary students, the participant taught middle school science. Participant C used social media for professional and personal reasons. The participant's main focus on the professional use of social media was for communication with students and parents, behavior tracking and reporting, and exhibiting of student learning through use of digital portfolios. She expressed:

> I use Facebook® for my personal medium, and I've been using it for quite a while now. Professionally, I use ResearchGate®, and I use Twitter. So, once social media started becoming a popular thing within education, I started with Edmodo®…to give assignments, grade assignments, and chat. The kids had a place where they could chat back and forth. After that, the school started using GAFE, Google® Apps for Education. I decided to switch from Edmodo® to Google® drive, Google® classroom, and those types of social media apps. I had problems at that time because the younger kids had a really difficult time to log in in a reasonable amount of time. So, I went to an app called SeeSaw®, which I really liked because the kids could just use a QR code. But I was the only person using SeeSaw® in my school environment. So, this year, I tried ClassDojo®, which is another app that's kind of similar. It's more behavioral tracking than it is a site where kids can share a digital portfolio, and it's really limited. I am recently going back to Edmodo® with some of my classes, and I probably will go back to SeeSaw® also. Recently, they've updated their app so that now there's a portfolio piece so students can share videos, comments, or pictures or write some things that they are doing in class to their parents, who are hooked up to the app, which is great.

Participant D. Participant D was a female teacher, age group 41-50 in the state of California. Having taught for 18 years, the participant held four college degrees: two baccalaureates, one master, and a doctoral degree. Participant D currently teaches science in a junior high school while teaching online at the university level, had served as a teacher for students with special needs at the middle school level, taught Biology at the high school level, taught night school, homeschool, and remediation courses in both private and public-school settings. Participant D worked for a period of four years to start own non-for-profit charter school before going back to teaching in California. The participant used social media mainly for personal reasons and sporadically for professional reasons. She shared:

I use social media on my personal level a lot more than professional one, because I just haven't kind of learned to cross over into the social media on a professional level that much. In my personal life, I use Facebook® and Instagram® quite frequently, just to stay connected a little bit. I don't post often, and I'm not on there [Facebook®], but usually with Instagram®, I'm on there a little bit more. As educators in the classroom, we have different kind of guidelines. Some are spoken, and some are unspoken. As we attend workshops, and as we get more and more educated about these things now, we learn we should never cross the line of being friends with students even after. I'm conflicted in terms of professional and personal social media use. On the professional side, I'm connected with LinkedIn® mainly. I have a visual presence on LinkedIn® and Twitter. I'm on Twitter, but I don't tweet very often. I'm usually on Twitter only when I'm at a conference, and they ask to go on Twitter. [In my classroom], we have

Chromebooks®, and we have access to Google® Classroom. I've used Edmodo®

and Remind©. I have not used Edmodo® for a project, because at the time when I

was exploring Edmodo®, it was for my charter school. So, I think I'm kind of on

both sides, not just looking at it from a classroom teacher perspective, but

also…the administrative side.

Presentation of Findings

After data analysis was completed, the researcher discovered nine final themes

based on interpretations of participants' common experiences in the phenomenon of

implementing social media or social learning platforms as learning tools for educational

purposes. This phenomenological study was guided by the following central research

question: What are K-12 educational professionals' perceptions and experiences during

integrations of social media learning platforms for educational purposes: enhancing

classroom instruction focused on improved academic achievement and digital literacy?

After final data analysis, the final set of themes emerged, representing responses from all

four participants providing an understanding on their common phenomenon of integrating

social media learning platforms in classrooms to enhance academic achievement and

digital literacy of learners. All nine final themes are displayed in Appendix B with

supporting evidence of emergent themes.

Tables 1-4 reveal final themes for each subquestion, accompanied by relevant

quotes. Table 1 displays data solicited and gained relating to Subquestion 1, providing the

final themes with supporting quotes exemplifying each theme. Subquestion 1 was: How

do K-12 educational professionals' experiences influence personal beliefs on the

integration of social media learning platforms in the classroom? The two resulting themes

providing insight to Subquestion 1 were (1) improved learning experiences and (2) safe

social-media use.

Table 1

Evidence Supporting Themes Related to Subquestion 1

Themes	Evidence to support the theme
Improving Learning Experiences	• It gives my ELL students a voice, being able to tell me what they were doing or what they learned (Participant A).
	• It gears my lessons to generate more critical thinking, more collaboration, and to personalize those learning experiences for all of the students (Participant A).
	• I have actually had a couple of students who have now started looking into World War II, which they were very interested in. They started this chat room, and they're getting their classmates involved in it (Participant A).
	• I believe social media can be a powerful learning tool (Participant B).
	• I think it's a really good way for them to kind of showcase what they have learned (Participant B).
	• I do think Google® docs is a great collaboration tool (Participant B).
	• They were keeping digital portfolios using social media and communicating with each other (Participant C).
	• Being able to give them the opportunity to be able to post their videos for their classmates and parents to see, and then have their parents comment on them, that's pretty exciting for them (Participant C).
	• I noticed that Twitter is a great place to have students weigh in on some of their educational experiences or talk to them about certain things they are doing in classrooms (Participant D).
Safe Social-Media Use	• That incident helped me to push the professionalism of when you're at school, this is what you're using social media for (Participant A).
	• We have students sign a digital contract, which is a way to hold those students accountable and understand that when they use social media, they're still responsible for their own actions and behaviors (Participant A).
	• I expect my students to teach me too, so as far as self-efficacy, I don't think that influences how I use it (Participant B).
	• Our school is pretty good about setting those guidelines, like using Remind© instead of giving students your own phone number (Participant B).
	• They're trained on how to write appropriate comments to each other (Participant C).
	• First, they're in a protected environment, and second, people who care about them can read what's going on and use negative situations as learning experiences (Participant C).

Note. Sample evidence is listed by participant.

Table 2 displays data solicited and gained relating to Subquestion 2, providing the

final themes with supporting quotes exemplifying each theme. Subquestion 2 was: What

are K-12 educational professionals' experiences of professional development received

directing the safe and effective application of social media learning platforms? The three

resulting themes providing insight to Subquestion 2 were (1) professional development

advantage, (2) shift in focus, and (3) educator role.

Table 2

Evidence Supporting Themes Related to Subquestion 2

Themes	Evidence to support the theme
Professional Development Advantage	• …it actually shapes the way that I start thinking about how I'm going to continue to teach (Participant A). • Our school corporation is actually very good at the professional development that is made available to us once a quarter (Participant B). • …being the gifted and talented facilitator, I'm the only facilitator at my school and across the district, we have a Google® team folder where we are sharing information, lesson planning, etc. (Participant C). • …they actually sent us to conferences and those Google® conferences are a lot of fun. You learn how to use a lot of apps, a lot of different platforms to integrate, you know into your lesson planning (Participant D).
Shift in Focus	• If we allow some of the professional development to show how to incorporate those in a productive way, I think a lot of teachers would suddenly realize social media can be a useful tool in education (Participant A). • I think because we are the ones kind of driving the development that we think we need, social media's use is growing in our school, especially for educational purposes (Participant B). • …somebody who has a positive experience with it sharing that positive experience with other people, letting them look in, you know on the peripheral to see how it's being used and maybe get some ideas for themselves about how it could be used (Participant C). • It will help us, the ones that are not using social media in the classroom, to actually start somewhere (Participant D).
Educator Role	• I also run several PDs through the year to help out teachers implement those kind[s] of programs into their classrooms and also to help them troubleshoot… (Participant A). • When we launched Canvas®, there was a whole lot of professional development around that, and some of it I even got to teach (Participant B). • …because I'm interested in this, Google® Apps for Education has professional development that I can seek out on my own: webinars, whatever, and partake in those (Participant C). • [There is] nothing for social media, and regardless [of] how much they offer or not offer, I'm always searching to improve my practice some kind of way (Participant D).

Note. Sample evidence is listed by participant.

Table 3 displays data solicited and gained relating to Subquestion 3, providing the final themes across all four participants' interviews with supporting quotes exemplifying each theme. Subquestion 3 was: What are K-12 educational professionals' experiences in the use of social media learning platforms as a tool for digital literacy instruction. The two resulting themes providing insight to Subquestion 3 were (1) development of higher-order skills and (2) development of digital literacy.

Table 3

Evidence Supporting Themes Related to Subquestion 3

Themes	Evidence to support the theme
Development of Higher-Order Skills	• …they actually will share math problems and math discussions with each other…to build their own learning (Participant A). • I have a girl in class who is autistic. [She] uses[s] social media to communicate what it is that she wants to say (Participant B). • They were collectively working on [social media]…to put together a collaborative product of our [school's] 90th [anniversary] celebration (Participant C). • In science, we always have to learn APA© [style], always combating with the English teachers' MLA [style], so they're learning both writing styles (Participant D).
Digital Literacy Development	• They can do a digital presentation where they actually record themselves presenting (Participant A). • …using interactive media, they will be making movies (participant B). • [Students] can find tutorials about things that they're interested in (Participant C). • I encourage my students to use whatever electronic device available to look [up] things they may not know very much about (Participant D).

Note. Sample evidence is listed by participant.

Table 4 displays data solicited and gained relating to Subquestion 4, providing the final themes across all four participants' interviews with supporting quotes exemplifying each theme. Subquestion 4 was: What are K-12 educational professionals' experiences on the development of safe and appropriate educational use of social media learning platforms. The two resulting themes providing insight to Subquestion 4 were (1) level of educator involvement and (2) legal and ethical considerations.

Table 4

Evidence Supporting Themes Related to Subquestion 4

Themes	Evidence to support the theme
Level of Educator Involvement	• Five years ago, we ha[d] some input…[in the form] of a survey (Participant A). • We just got a new principal this year, and…she's very supportive of [social media] as long as the students are taught how to use it appropriately (Participant A). • Our administrators develop the policy, and then they bring it to the technology committee ask[ing] what needs to be changed [and] how do we enforce it (Participant B). • [The] Internet use policy, not necessarily [just on] social media, but it would cover that, basically talks about appropriate and inappropriate use (Participant C). • I'm not involved beyond the point of being a rep in sharing the information back with the teachers as it changes in relation to the subject of social media use for educational purposes (Participant D).
Legal and Ethical Considerations	• …we need to ensure that we're educating our parents as well (Participant A). • If the policy is strong and clearly defined for both the student and the educator, it's going to keep that relationship professional (Participant A). • Privacy, I think, is the biggest consideration when you talk about social media policy (Participant B). • The number one [ethical and legal consideration] is the kids should be protected (Participant C). • To me, you are kind of looking at freedom of speech, and is it posted on social media tool a part of that (Participant D). • I think we should have some clear guidelines and instructions of what is appropriate and what isn't (Participant D).

Note. Sample evidence is listed by participant.

Descriptive Experiences in Response to Research Subquestion 1

Researcher made efforts to understand the influence experiences of K-12 educational professionals had on personal beliefs pertaining to the integration of social media learning platforms in the classroom. Participants' responses to interview questions geared to solicit information pertaining to Subquestion 1 helping to understand how K-12 educational professionals embraced educational use of social learning platforms to increase student academic achievement and digital literacy skills. The themes emerging

based on participants' descriptions include: improving learning experiences and safe social-media use.

Improving learning experiences: Participant A. Participant A was very fond of advantages of using social media for her own learning as an online doctoral student. She appreciated the time flexibility allowing her to work full time while handling her studies online. She expressed:

> I think that working on my doctorate in a digital environment really helped me realize the benefits of social media, not just for me as a learner, but possibly for our future generations of learners. We need to shift our curriculum and our instruction because I found that I could go at my own pace. I didn't have to wait. I could move on. If something came up, personal or otherwise, there was a way for me to catch up, but I could still remain in the class, and still get my work done, but it was at my own level. So, realizing that our students have lives outside of school, and sometimes real life does throw curve balls even to those K-5 students, I realized that by them having that ability to access social media and to do their learning throughout that kind of digital platform, it gave them that flexibility, and it gave them more of a buy-in of their education.

In her personal life, social media use helped Participant A to remain in contact with her family living overseas during good or bad times. In the past, she was only able to write letters waiting a long time before receiving a response from her family members. Use of social media helped her reduce those physical and time barriers. She explained:

> At the personal level, I Skype and Facebook. My whole family lives in England, and before the Internet or social media, I would send them cards at Christmas, but

that was pretty much it. [With use of social media], when we had a family crisis

here in the [United] States, I could keep them up-to-date, and one of the nicest

things was my mom who was in the hospital got to see and speak to her sister on

the computer. So, that really hit home just how it decreases those actual physical

boundaries between us and our families, especially in this day and age where we

travel so much. It really hit home.

Participant A appreciated her ability to extend her reach to more students

providing lesson plans asking higher level of thinking responses while accommodating

the language needs of the English Language Learners (ELLs). She stated:

When I first started, I was really impressed with how I could reach more students

at an individual level. That encouraged me to also look at social media with the

ELL students who may struggle with the English language. It gives them a voice

being able to tell me what they were doing or what they learned. Sometimes, it

was more effective than actually trying to have them write, like an exit slip. They

could actually explain their reasoning, and I could actually determine how they

were thinking, and so that gears my lessons to generate more critical thinking,

more collaboration, and to personalize those learning experiences for all of the

students.

Participant A further expressed:

Some of my students are extreme ELL. They speak very limited English, and yet

they can type something up in Spanish, send it to a friend who speaks mostly

English. Their friend hits translate, [message] translates, and they can respond

back. So, it is actually helping our students to reach those academic achievements

by, I don't want to say decreasing the ELL barrier, but reducing that ELL barrier

making it easier for them to understand the concepts instead of struggling with the

language.

Use of social media as a communication tool also assisted students who struggled

with learning to overcome their anxieties of expressing their levels of understanding face-

to-face. She explained:

I think if we use it as a way for students to share ideas and also to ask questions in

an environment where it's, I don't want to say safe, but it gives them a comfort

level because it's not directly face-to-face, I really feel that helps a lot of our

students with their academic achievement.

Participant A understood first-hand how beneficial it is to use features of social

media for learning. She expressed:

One of my biggest beliefs, and the kids laugh and say that I always tell them to

learn smarter, not harder. We have this vast resource of knowledge out there, and

we can reach out to so many people to ask them questions and to learn from them,

and for them to learn from us. So, through social media, we can make changes in

our own society, in our own communities, and in ourselves.

Safe social-media use: Participant A. Participant A was very engaged with

integration of technology and social media to assist students in learning. Participant A

was actively involved in decision-making process collaborating with her administration

to best serve the students' academic needs. She shared:

This year, I'm actually the Lead Teacher for the Blended Academy, which is our

multi-age group. And so, I sat with our current administration and came up with

the program, the curriculum, and what social media components we would be applying for each grade level.

Participant A incorporated social media daily in her personal and professional life: teacher, teacher trainer, and learner. She continuously encouraged her students to learn how to use a variety of tools and find new information. She explained:

I push my students to challenge themselves to learn new things, and if they find something that they're really interested in, to continue to learn about that on their own time, because that's what I do at home. I tell them, a lot of times, I'm on webinars engaging with other professionals. So, I have actually had a couple of students who have now started looking into World War II, which they were very interested in. They started this chat room, and they're getting their classmates involved in it. I thought that was amazing to see them doing their own self-efficacy building, buying into their own learning the same way that I do with my own.

She was not afraid to carefully monitor students' social presences taking every opportunity to provide teachable moments for her student ensuring students had improved digital citizenship and owned their actions. She shared:

We had a fifth-grader who sent threatening emails to several of the teachers in our Academy and to some of the students through the Google® Docs and Gmail®. It was the platform that the student used to intimidate and harass others. I felt like, we know that even in the big world as I call it, there are trolls out there on the Internet. There are people out there that do use it for inappropriate reasons. So, I made sure that when I talked to the students, that I wanted to push that we can use

it for good, not just to go on Facebook® or Snapchat® to send our friends little

selfies, but to actually increase our learning. That incident helped me to push the

professionalism of when you're at school, this is what you're using social media

for. And a lot of the students have really taken that to heart (Participant A).

We have firewall set up to protect our students. Also, we have students sign a

digital contract, which is a way to hold those students accountable and understand

that when they use social media, they're still responsible for their own actions and

behaviors. Again, that's part of my personal belief of The Golden Rule: You treat

people the way you want to be treated. That holds true even with social media,

and so within our school and school district, we hold the students to those high

standards.

Participant A further explained:

I've used social media for quite a few years with my students, and every year, you

always have one or two students who want to test the boundaries as the same in

society. So, as long as you're staying on top of your students, and you're

encouraging them to use it in the correct way, I still think it's a strong tool. But

like any tool, it can be used for the wrong reasons and we just have to be vigilant

on that.

Improving learning experiences: Participant B. Participant B believed in the

positive influence use of social media has as an educational tool, especially to evaluate

students' learning. She stated:

First of all, I believe social media can be a powerful learning tool. So, once

students see it that way, and we just kind of take baby steps towards using it, I

think it's going to be a really, really good way for them to kind of showcase what

they've learned.

Participant B used social media to provide feedback to her students. However, she

felt not many students took advantage of her feedback and to celebrate students'

successes while keeping track of their progress levels. She expressed:

For us, social media can be [used to give] feedback. They submit a Google® doc

or slide, where [the teacher] can provide feedback on their progress. Also, it could

be a means of celebrating their achievements. Those are the two [areas] that I use

it for mostly. I think it [is beneficial] for the students who use it. Unfortunately,

I'll write a comment for students on whatever they've turned in, whether it's

presentation they created, or [something else]. I will say [to the student], did you

read the comments? Well, no. So, most of them, and I think that will change over

time, but most of them don't go back and look at that communication piece.

Additionally, Participant B felt social media was a great place where absent

students can access information stored. The students could review videos or notes

independently, but Participant B felt the students preferred to speak directly with the

teacher upon their return. She stated:

So, if a student is absent, and you don't have a chance to talk to them one-on-one

about [the] research that they're [supposed to be] doing, [they] can use social

media for [accessing missed information]. But I still think a lot of students benefit

from that one-on-one conversation with a teacher.

Safe social-media use: Participant B. Participant B recognizes the benefits of

social media for learning, yet she cautions on ensuring students' mindsets get shifted

from entertainment purposes to educational ones. She experiences difficulties with students focusing on the assigned tasks. She explained:

> I think integrating social media is a huge challenge, and I say that not that we should stop doing it, but I say that because my students, and I hope this isn't true everywhere, but they still don't see social media as an educational tool. We are trying to change that mindset, but they see it as an entertainment vessel more so than a how-can-I-learn or how-can-I-demonstrate-what-I-know using social media. So, I think it's a challenge to change their mindset. It is the students getting off task, that's exactly it because they see something that's more entertaining to them, and then they just kind of forget what they were doing, or, you know, the ones that think they're comedians will kind of veer the others off task.

Additionally, Participant B found her self-efficacy in using new technology or specifically, social media was insignificant to actual implementation in classroom instruction. She stated:

> Obviously, there are skills…that are constantly changing as far as using social media. You know, I expect my students to teach me too. So, as far as self-efficacy, I don't think that influences how I use it so much as maybe other teachers because I know other teachers feel like they need to know everything about it, and feel comfortable using a new tool of any kind before they kind of throw it out there for their students to use. So, I mean when a student can teach me something new, I think that's a great thing.

Improving learning experiences: Participant C. Participant C is an early

adopter of social media for educational use. She utilizes a variety of social learning

networks to help students by delivering and grading assignments, chatting with students

or allowing students to chat with each other, and tracking their behaviors. She finds social

media helpful in maintaining digital portfolios and collaboration. "Basically, they were

keeping digital portfolios in social media, and communicating with each other for help.

Also, with some of them, I could give and receive assignments" (Participant C).

Safe social-media use: Participant C. Participant C was able to see

technological tools' educational uses firsthand from developers at conferences. This

enabled Participant C to make choices fully-supported by the administration. She focused

her choices to serve her students' academic and digital literacy development. She focused

on features, like effective communication with students and parents and safety.

Participant C believed that using social media for learning would prepare adults

possessing appropriate digital citizenship with the use of appropriate teacher monitoring

and explicit teaching of desired skills. She shared:

> For instance, I'm making a stop-motion animation video. I've made the video and
>
> shared that with my parents in the SeeSaw® app. I can upload that, and not only
>
> will it share it with my parents, but it will share that with my classmates as well.
>
> And like the others, it just goes into my portfolio. So, then as a teacher, I can look
>
> at that class stream. Other students can look at it, and they can give their little,
>
> you know, thumbs up, this was cool, and/or comment. You know, as the teacher, I
>
> definitely make sure that they're trained on how to write appropriate comments to
>
> each other, which I think is a really good situation, [by] having that safe

environment where they're being trained on how to respond to social situations or postings, but I could also go look in their files to see all of the things that they had thought were important or valuable to share on there.

Participant C was greatly motivated to use social media learning platforms because she believed they would serve the needs of her students as they were very familiar and comfortable with many social media platforms feeling at ease with using them for learning. However, Participant C believed her students needed learning experiences in a protected environment. She explained:

The thing that influences me the most or my belief in the integration of social media is that young children are crying out to do these same things. I mean, they admire these YouTube® video people that are out here. Because I'm with third through fifth-grade, it's not necessarily something that [this age group has access to. Although,] maybe their parents are excited about having them start a YouTube® profile. Some of them do, but maybe not the majority. Anyway, they are really too vulnerable, I think, to start Facebook® accounts or get out there in unprotected situations. Now, that's not to say that some parents don't support them and help them through that, but being able to give them the opportunity in an app like Edmodo® or SeeSaw® to be able to post their videos for their classmates and their parents to see, and then have their parents comment on them, that's pretty exciting for them. And, it's a really neat way to help them develop good skills because they're not there. First of all, they're in a protected environment, and second of all, there are people that really care about them that can read what's going on and then use maybe negative situations as learning

experiences or positive situations [by saying], hey, this is exactly what this medium is for, you know, to really build each other up and encourage each other. So, I get that my personal beliefs or experiences have been positive or I've changed them to have a positive outlook.

Participant C further explained:

I'm definitely positive towards [social media] when I am faced with those negative situations. For example, there are times when people are not kind or say things that are inappropriate. I get to use those as learning situations. [I say,] first of all, you know you said this online. There's no way it can be deleted. It's there. You just made this public statement to everyone, and it's not like you can never be denied. So, really guard yourself as to what you're going to say, how you're going to present yourself, what your online presence is going to be like. And to me, I think that those are really important lessons, and it influences my integration because I don't see that as a problem. Oh, they're being bullied. So now I'm going to mix this for everybody? No! They would have been bullying anyway. I just wouldn't have seen it, right? This is just a way for this to be out in the open and for them to get help, and me to say, let's use this learning experience and change the way that we use [social] media.

Participant C felt comfortable with not being the expert of all the tools she used for instruction. She felt her self-efficacy was not an indicator of integration of social media for educational use safely influencing academic and online presence skills of her students. Participant C stated:

When it comes to technology, and this is my philosophy, there's no way I can keep up with all of this. I mean, it just moves too fast. I'm over 50 years old, right? What the kids are getting, what their parents are doing, it's probably more, they probably know way more than I do. I'm very comfortable with that. My [role] just isn't necessarily, I guess, to know everything. I guess that's how my self-efficacy comes into play because I don't feel like I need to be the culmination of all wisdom and knowledge. I just need to be the facilitator, and I might not know all the answers. I'm comfortable with that. But [some] things that I do know, number one: I really care about my students. Because I care about the students, I'm going to check up on things and teach them to be kind, you know? It's not necessary that I need to know everything about social media itself. But I have something to offer on how it gets used appropriately and in a way that builds everybody up rather than tears people down.

Improving learning experiences: Participant D. Participant D was uncomfortable in using social media for educational purposes. However, she had used Twitter and Instagram® to showcase an activity with her students, and as encouraged by the producers of the scientific video shown during that activity, she and her students shared moments of their experiences using social media. Participant D had limited experiences in integrating other social media or social learning platforms. During her role as an administrator of her charter school, Participant D encouraged the use of Google® classroom, Edmodo®, or Remind© for classroom instruction. Participant D found some mainstream social media as beneficial tools for education. She stated:

I see that our school is using Instagram®, and I'm interested in getting involved

in that at some point. [Also,] I noticed that Twitter is a great place to have

students weigh in on some of their educational content experiences, or talk with

them about certain things that they're doing related to the classroom content.

Safe social-media use: Participant D. Participant D was reluctant in social

media educational use because of many incidents shared with her during conferences by

her teacher association. She understood times are changing and educators must adapt by

embracing what is inevitable. Participant D shared:

Students have electronic devices, and their devices are not going to go anywhere.

I was just sitting in a workshop yesterday, and you know, the guy was, you know,

holding up his cell phone. He said, the kids have access to these, and they're not

going away, you know? And even [our] assistant principal said, we have to find a

way to integrate those things into our learning environment more. So, it is being

talked about and discussed, how can we use students' cell phones more in the

classroom, what type of software and social media tools can we use in our

learning environment. And so, I think it's important, and I think, I'll be seeing

more of that in my school. I see more of that in other schools to date.

Participant D felt her comfort level, willingness, and self-efficacy were very

crucial in her decision-making process to integrate social media for instruction. She was

also concerned social media implementation may overwhelm students when teachers

overuse in classrooms. Participant D expressed:

[It is important for] myself to be willing and have a positive attitude towards

integrating the use of social media. It's very important to be willing in order for it

to work. A lot of teachers aren't comfortable, and they don't do a whole lot with social media. And then I noticed that some people end up integrating quite a bit of social media and web-based programs in classrooms, and it's a little too much and overwhelming for the students. So, my personal belief is that, as I grow and I'm willing to use the programs and implement them, it causes me to integrate it more, use it more, and do it more.

Participant D's self-efficacy in the program influenced the rate of implementation and access to her students. At times, Participant D decided the difficulties in proper understanding of programs were reason for terminating their uses. She explained:

If I'm not comfortable with what I'm doing with the tools or with the program, it'll take me longer to actually use it a certain way. It doesn't discourage me from using it at all, but it just takes me a little bit longer. If I'm more comfortable with whatever it is, and I have a handle on it on my own, it's easier for me to share it with the students and encourage them to use it. But sometimes, my own self-efficacy causes me to evaluate very seriously whether or not I'm going to do it or not or. But, most of the time, when I get in that rut, you know, it's like I know I'm going to do it, and I know I have to do it, but sometimes, I'm a little bit floored and not comfortable. If I'm comfortable, it's not like that.

Participant D attended conferences organized by the teacher association in her state, where she has been exposed to information on situations with implementation of technology by educators resulting in negative outcomes. As a representative, Participant D received information from teacher association conferences and shared with other teachers at her school. The negative incidents made her feel very uncomfortable, also

compounded by a lack of clarity offered by current policy in Participant D's school and district. She expressed:

> I attended a conference back in November, and one of the sessions was about this exact question. It gave a lot of examples of how using social media with students can go wrong, and how careful we have to be. Social media was used to post. They showed several examples of teachers posting certain things, and a teacher posted some information that was inappropriate, and even though it was posted on a personal social media page, it was there for other people to see. So, in terms of my personal beliefs, some of those examples that were shared scared me. It made me uncomfortable about using social media for educational purposes. Even though it's a great tool to use for educational purposes, it made me very uncomfortable, and after coming out of that session, you know, I just had to decide to take a stand on what I wanted to continue to go forth and do. A lot of these examples made me feel very uncomfortable. It made me think deeper about what I'm doing with social media, and how I do it, and [it] just caused me to be cautious in my implementation.

Discussion of Participants' Responses to Subquestion 1

Two final themes emerged based on the participants' descriptions: improving learning experiences and safe social-media use. Most participants recognized the value in embracing social media tools for educational use. Some were engaged in the decision-making process of tools chosen for implementation feeling supported by their administration in their efforts to improve instruction. The benefits of using social media included differentiation of information and pacing, increased access to learning, and

meeting unique learning needs of students like those whose primary language is not English. Some felt it was their duty to embrace what youth is crying out to have implemented in their learning experiences.

All participants cared about the safe implementation of social media for learning. Most were focused on explicitly teaching their students responsible online presence turning any negative situations into positive experiences. Those same participants were invested in maintaining this safety through parental involvement and frequent monitoring. Most participants were able to implement and facilitate uses of multiple social media for learning regardless of their self-efficacy levels. One of the participants required willingness, comfort, and self-efficacy to evaluate integration of social media or any other technological tool, and the rate of integration was dependent on her self-efficacy and comfort level.

Descriptive Experiences in Response to Research Subquestion 2

Researcher made efforts to understand how the experiences of K-12 educational professionals in receiving professional development (PD) influenced the safe and effective application of social media learning platforms. Participants' responses to interview questions geared to solicit information pertaining to Subquestion 2 helping to understand how K-12 educational professionals' professional development received affected the integration of social media in classrooms. The themes emerging based on their descriptions include: professional development advantage, shift in focus, and educator role.

Professional development advantage: Participant A. Participant A worked in a district where professional development (PD) was available for educators to be certified prior to implementation. She stated:

> In fact, our district requires any teachers that are incorporating social media into their classroom to be certified to teach in a blended or technology-rich environment. And so, they offer that support so that way we know what to look for and also how to use it appropriately and how to guide our students to use it appropriately.

PD was offered to Participant A and her colleagues prior to implementing social media platforms in the classroom. Also, she participated in online PD across schools leading her to believe in implementing similar practices with her own students. She explained:

> I took several courses on incorporating social media through the district. We've also had people come out to our site from the district to give us specific professional development on using things like SeeSaw®, Twitter, and Edmodo® to generate those Socratic discourses between students. We actually did and I don't know if this would count, but we did a webinar for the district. It was several schools talking together about how they're applying the technology within their schools. And I thought this is such a great way to share information with each other. We should let our students do that. And so, this year, I have a couple of students in the fifth-grade class that are actually sharing with students from another class on the same project that they're all working on together.

Participant A recommended PD introducing educators to the vast variety of social media learning platforms. She felt obtaining PD prior to implementation into the classroom would avoid negative outcomes. Participant A explained:

Well, I think one of the biggest ones is an introduction to the different social media platforms that are available out there and how you know which ones would be most suitable for the age of the students because a lot of times, I think, sometimes, we want to rush the kids in and then other times, it's almost like teachers want to push the kids a little too fast with the media with the social media or they're too afraid to put social media in the hands of younger students. So, I think allowing teachers to be able to see the different social media platforms available and how to use them correctly would influence the way that they're applying them in their classrooms.

Participant A understood the importance of PD to remain well-informed with the rapidly-changing technology supporting instruction for effective implementation in classroom instruction with ongoing PD. She shared:

I think continued development [is also needed] because technology is constantly changing and we have to keep up with it or we become extinct. So, providing professional development to support the teachers through the year and also continued support will allow them to apply social media [and] to implement social media in their classrooms effectively.

Participant A found a passion for implementing social media when she worked on her online doctoral degree. However, her undergraduate degree exposure to any technology tools was non-existent. She expressed:

Well, when I got my bachelor's, I didn't have too much professional

development. Technology was still in that gray zone of education where we'd like

to use it, but we didn't want to really give it over to the students per se. But as

I've worked on my doctorate degree, I've really started to see how social media

platforms can be applied in [instruction]. So, [PD] was through [my doctorate

degree] more than my actual bachelor's degree. I had conference meetings

through GoToMeeting® as well as Google® docs, where I was actually

collaborating with my team at the same time. Even though we were across the

country scattered, we could still collaborate together and I thought how important

this would be for our students in the future that they could actually start to

collaborate with peers across the globe and how that could actually just generate

more knowledge and build more of that collaborative process that we want to see

in our learners.

Shift in focus: Participant A. Participant A was concerned about the direction of

PD for educators and emphasized the importance of PD focusing on usefulness of social

media platforms rather than what negative incident may occur with its use to shift the

perceptions of educators influencing the adoption and implementation of social media for

education. She stated:

I think it's one of those things because too often, we always hear what's going on

that's negative with social media like Snapchat® and Twitter. I feel that if we

allow some of the professional development to show how to incorporate those in a

productive way, a lot of teachers would suddenly realize social media can be a

useful tool in education and not a distractor, which a lot of teachers sometimes feel it is.

Participant A felt increasing awareness of educators on the positive ways to use social media for learning would influence an increase in implementation in classroom instruction. She expressed:

I think that once teachers are aware through the professional developments of the myriad, just the vastness of opportunities that social media provides for education and for the educational purposes of a teacher, I really feel that it's going to take off a lot quicker, especially in the younger grades. So, I feel that without that professional development, we're going to actually hinder ourselves.

Educator role: Participant A. Participant A not only engaged in PD as a learner, but she evolved in her role by providing PD to other educators in her district. She shared:

I also run several PDs through the year to help our teachers implement those kinds of programs into their classrooms. [I] also help them troubleshoot so when they do have these issues…, they [know what to] do to address them and how they should address them.

Participant A viewed herself as an early adopter of new technology. Her adoption of tools was heavily influenced by PD made available to her through the district or online. She felt the exposure to different social media tools gave her ideas of what would work for her students' learning experiences. She stated:

I know that…we usually do the training quarterly through the year. So about four to maybe six times a year we have the training, and I find that every time they introduce something new, I want to jump in and try it. So, that again kind of lets

me see, I get to play with it, and I go, this might work in my classroom, or this

would definitely work with this group, or I might not be able to use this now, but I

could use it with my peers. So, it actually shapes the way that I start thinking

about how I'm going to continue to teach.

Participant A's previous beliefs that age of educator would influence adoption and

implementation of technological tools for learning were reinforced by her experiences.

Previously, she thought the higher the age of the adopter, the lower the rate of adoption

would be. She explained:

The biggest thing that I've noticed is some of our older teachers, and I can say this

because I'm an older teacher, and I've been doing it a long time, get stuck in a rut,

and when we introduce new things into their instructional styles, I think that

scares them a little. But as I tell them, change is scary, but change also makes us

continue to grow. So, I really think that if our teachers are on board and if their

beliefs and attitudes are that technology can be a benefit…[and] productive, then

they're more willing to try those newer things, especially using social media.

[This is important] because by having the students share, by having them send

each other questions, we are building their ability[ies] to communicate not just

within themselves, but also, with the rest of the world.

Participant A felt the focus and method of delivery of the PD influences how it is

received by educators directly influencing its effectiveness. The learner's characteristics

and preferences influence the outcome of the PD. She shared:

We actually have a video they make us watch every year through our Pathlore®,

and then we have to take a quiz on it. And I have to be honest, a lot of our

teachers don't really respond well to that type of training. I think they'd do better if it was like a webinar or a real person or something like that. But because it's like you watch a video, you answer some questions, it doesn't really work as effectively as I'd like it to.

Participant A felt the rate of implementation of social media as learning platforms could be influenced by those in power at the school. Administrators' responsibilities to maintain student safety while increasing student academic achievement, paired with their own professional development and understanding of safe and productive ways to use social media as a learning tool were factors influencing the educators' willingness for classroom implementation. Participant A said:

We just got a new principal this year, and…she's very supportive of [social media] as long as the students are taught with how to use it appropriately. When she sees students messing around with it at recess or they're snapchatting one another, she gets a little worried, but she wants it to be used for professional purposes [only]. She says they're here at school to do a job, just like we are. And I'm on board with that too because that's what I told the kids. She's really influenced the use of it and encouraged it especially [with] our older [students].

However, not all educators have the same experience as Participant A in the area of administration supporting the use and implementation of social media for learning. She explained:

I actually had several teachers from a couple of the other schools around us that are trying to incorporate Blended [learning]. They came to me because they know I use a lot of technology and social media platforms. They wanted to use

Edmodo® and their administrators said, no, we don't want the students talking

with each other. I told them they're going to talk to each other whether they call or

text. At least when they're texting, they have to practice spelling. I think

sometimes, the administrators discourage it because they're not aware of its

benefits. So, I talked to one of the administrators who was my old AP, and I

showed her how I use it in my classroom. She said, "I think it's fine if we use it

like that."

Professional development advantage: Participant B. Participant B taught in a

school with frequent PD chosen by educators and planned and delivered by their e-

learning coach. Many of the training sessions were tailored to address the teachers' needs

in learning and implementing social medial learning networks for instruction. She shared:

Our school corporation is actually very good at the professional development that

is made available to us once a quarter. We have some PD just for social media.

So, we get to choose, and it's kind of a round-robin thing. Well, you don't have to

go to all sessions. So. our e-learning coach does a really good job getting

information from us on what we want to have professional development on and

then making that available to us, so…she does an excellent job.

Not only PD informed teachers on the educational uses of multiple social learning

platforms available, but it also provided them using the desired mode of delivery by

Participant B allowing her to benefit greatly from these experiences and motivating her to

implement in her own classroom. Participant B's experiences with social media learning

networks gave her a first-hand look at the benefits of social media's implementation in

learning. She shared:

One of our most recent [PDs] was on Twitter, and it was [about] using hashtags, and then tweeting at somebody versus just a general tweet. So, that was the most recent [PD]. I personally like it. I know there are other teachers that would rather sit and listen to somebody, but you know, when it shows us exactly where to click and how to do something, I really like that and the fact that you can slow it down, and re-watch something, or re-listen. As a matter of fact, I started making videos for my students so that they could do the same thing if they don't get it in class, and they're too embarrassed, or think, she's not going to help me, and give them another way to, to get the material.

For Participant B, exposure to PD on social media was almost non-existent at the undergraduate level, but it changed with during her Instructional Systems Technology certificate. She stated:

Well, I got my Master of Science in 1999. So, there was no [PD]. It just wasn't! But, when I went back, and I was working on my Instructional Systems Technology certificate, there were a lot of times professors would say, hey check out this, whatever it was. Or either it was a tweet that led you to a link for something else, or it was, have you ever thought about using, like Pinterest® for example? So, you're kind of [understanding] what your students' interests are. But as far as getting that professional development while I was working on the degree, not so much.

Participant B further shared:

When I got my undergraduate and master's degree, there was really NO social media, but while working on this certificate, and it's funny because I don't

necessarily think of them as social learning platforms but as tools to use. But,

there's a couple of different video editing places, and gosh, I can't think of the site

right now…, but it's a [site where] you upload a video, and then you can ask

questions at certain points in the video, or you can pause it and add some

commentary, but those kinds of tools definitely.

First-hand exposure with social media, helped Participant B determine what she

preferred to use and implement in her own classroom while frequent ongoing PD

supported her implementation efforts. She explained:

It's funny because you know every professor's different about how they structure

their Canvas® class. You also find out there are things that you go, hm I don't like

[this or] you can't follow this. So, you find out things you don't like too, I guess is

what I'm saying. How often? Probably, [I experience PD] once every other month

or so, [on] average. Sometimes that's kind of all at once. Like, we co-hosted the

four C's learning conference.

Shift in focus: Participant B. Participant B taught at a school where educators

drove what PD was offered. Their e-learning coach prepared and delivered training

tailored to the teachers' needs. As a result, PD was well-received since learners were the

ones guiding the PD offered, shifting focus of social media in classrooms to educational

use rather than purely to disseminate information, increasing the rate of implementation

in classrooms. Participant B explained:

As far as professional development influencing our use of social media, I think

because we are the ones kind of driving the development that we think we need,

its social media's use is growing in our school, especially for educational

purposes. Not just for making people aware or informing, but for offering another mode of learning.

When negative incidents occur, the school administration provided training with a shift on increasing awareness of students and teachers on what they can and cannot do with the use of technology, ensuring the negative incident was treated as a learning experience for all stakeholders. Participant B explained:

So, we had a 15-minute faculty meeting just as a, hey heads up. Your kids are doing this. You might want to be aware. And it wasn't so much, and [the student] didn't really even know she was doing anything wrong so, we had a faculty meeting, and then maybe a day or two later all the students were called to the auditorium and [administration] said, hey you can't, you know, you can't do this. Your, you don't have permission to do this, first of all.

Educator role: Participant B. Participant B received PD, and she provided PD to other teachers at her school. She served in both roles of learner and instructor. "When we launched Canvas®, there was a whole lot of professional development around that, and some of it I even got to teach" (Participant B). Participant B felt teachers' choice in requesting PD for their classroom needs improved learners' motivation and buy-in, saying:

As far as the professional development [assisting in] overcoming preconceived negative attitudes, I don't know that you can fix that for everyone. As a matter of fact, I know you can't fix it for everyone. But again, because I think we're the ones driving what we want to see and what we want to learn, that's helping a lot, a lot!

So, I think the more you can get educators involved in the professional

development planning, the better off a school corporation is going to be.

In addition to choice, Participant B was able to have hands-on experiences with

social learning platforms to master their uses and implement in her classroom. She

explained:

Although [Canvas®] is, you know, pretty, it's got its limitations. That's probably

the biggest way that we get our professional development, and then we can kind

of pick and choose from a menu of options. And as long as we can demonstrate

that, not so much that we've watched the lesson or whatever it is, but [we must

show] that we understand how to use it.

Besides the delivery mode of PDs, learners responded differently based on their

preconceptions influencing what they obtained from offered PD. Participant B stated:

As far as how the educators responded, some of us chuckled. The teacher that it

happened to did not chuckle so much. So, it was a mixed response. Some of us

were very like, oh I would have never thought to do that. I'm glad you told us that

our kids are even thinking about doing this, and others were just shocked, I guess.

Participant B participated in a major conference brought into her school. She was

an early adopter willing to learn. Most importantly, she knew how she could best benefit

from this major PD to increase her self-efficacy in educational use of social media. She

shared:

We co-hosted the four Cs learning conference. That's a two-day event, and you

get a lot of social media, or learning platform, or just educational kind of tips. I'm

one of those persons that learn by trying. Listening is fine, but I [need to] actually

get in there and play with whatever the tool is. I am much more confident in my

ability after I've used it, not just listening to some PD. But if the PD has a hands-

on component, I feel much better about it.

Age of adopter was a factor in adoption and implementation of social media for

educational use, and Participant B explained how surprised she was by the contradiction

of reality at her school versus what she was accustomed to thinking. She also shared the

overwhelming feeling teachers experienced due to increased workload expectations:

It doesn't seem the use of social media seem to be necessarily an age thing,

because I thought originally [differently], and I asked our e-learning coach about

this. I said, do you see older teachers, teachers who have taught 10, 20 years not

wanting to use social media. I just flat-out asked her if it was an age thing, and

she said, oh no, you'd be really surprised. There are young teachers who just won't

try anything at all. So, I was really surprised by that response she gave me. As far

as perceptions and attitudes, some teachers feel like they're asked to do more and

more and more and more and more. They don't really know how to [handle] that

more and more and more, and they get discouraged, I think. Also, I think some

teachers just don't know how to help students develop digital literacy. Maybe,

that's what we need training on next.

Professional development advantage: Participant C. Participant C had a

different experience pertaining to PD offered at her school or school district compared to

Participants A and B. She shared:

In my experience, there is not a lot of professional development being directed

from the district. So, my district is not preparing me or providing professional

development for me for the use of social media. They might govern or say you can do this or you can't do that, but they're not really giving me professional development for the use of social media.

As a result, Participant C researched for PD on her own outside of her school and district. Since Participant C knew what her social media interests were, she focused her search at webinars offered first-hand by developers. She stated:

I have found…because I'm interested in this, Google® Apps for Education has professional development that I can seek out on my own, webinars, whatever, and [I] partake in those. So does SeeSaw®. I'm pretty sure ClassDojo® does, and so does Edmodo®. So, all the professional development for using effective social media, I can find…through webinars, but I have to be proactive. I have to seek out that professional development.

Participant C participated in PD providing her exposure to a variety of social media used for education. These experiences gave her the courage to overcome any anxiety with using new technological tools, making her a risk-taker. She used social media platforms to communicate with other professionals who were alone in the positions they served overcoming geographical barriers to help each other. Participant C shared:

Yeah. So, webinars are a great example. Another is what we're doing right now, GoToMeeting®. And then, there [are] some other platforms that are similar to this. It just is not com[ing] into my head right now where you are calling in. So, [a place where] some people from other parts of the state [and I] have had joint meetings [online], but we are miles apart. We're meeting on something similar to what we're using right now, but it's not coming in my mind. Sorry. Yeah. Zoom®.

That was right. So, we [used] Zoom® into each other and had some training that

way. Another thing that's really helpful for me, especially with being the [only]

gifted and talented facilitator…at my school and across the district [is the]

Google® team folder where we are sharing information, lesson planning, [and]

that kind of stuff. We have Google® documents that we work or share together,

and we can update them on real time where we're sharing lesson plan ideas and

just the different things that we're doing in our classrooms.

Participant C recognized the value of PD received in abilities to communicate

with other professionals in a timely manner increasing her efficiency in her work. She

stated:

It influences my practice because I'm able to communicate with people who are

not present in my current location, and I can get answers really quickly and move

on rather than waiting until I have time to call, write, or whatever. I can just [get

help] immediately [when] I [am] stuck in a situation in my classroom. Where do I

go here? What do I do now? And I can use a social media type of platform and

send it out and someone's going to answer that fairly quickly, and I can move on

and continue rather than needing to come back to that issue, remember all the

details, [or] whatever. So, it helps with efficiency and effectiveness.

Similarly, to Participants A and B, Participant C's experience with PD began

during her graduate coursework, with no technological tools including social media used

during her undergraduate degree. She shared:

[I] started my degree a long time ago when no social media was being used. Most

of my stuff with my master's and doctoral degree was online. So, I was using

Blackboard®, Bb® learn, which is similar to Google® or Edmodo®, where the

teacher gets to put all of their assignments in one location, and then students get to

do the work and then turn it back into that location. Some of the other things that I

really liked using was something called VoiceThread®. There were also

Nearpod® and, I can't remember, there was another one. It was like a bulletin

board, where you put little sticky notes up, like a brainstorming thing. There were

quite a few platforms…during my educational degree that professors used that

really helped. I guess, let's [see]. They really helped facilitate discussions long

distance because most agree that I was not in a classroom for most of that, but it

also provided, if you weren't long distance…a record. So, you kind of go back and

look at that discussion or review it if you wanted to.

Participant C's first-hand experiences with social learning platforms increased her

personal efficacy in their educational use. The frequency of experiences assisted in her

persistence to implement in classroom instruction. Participant C explained:

I'm going to say that I experience frequently social learning platforms just

because my teachers used Bb-learn and a lot of these other online applications,

and it shaped my shaped my personal efficacy because I wasn't just introduced to

one method. For example, I think this is my first time on GoToMeeting®, but it

really wasn't that intimidating to me because I'd used Zoom® and some other

online platforms like FaceTime® or Skype®, and I could go ahead and hook up to

you with this GoToMeeting®, and I'm I didn't really feel intimidated by doing

that.

Shift in focus: Participant C. Participant C's district offered PD focusing on appropriate use, especially when it pertained to cyberbullying using it as an increasing awareness platform shifting focus towards the positive aspects of using social media tailored to adult practitioners and young leaners. She said:

Professional development that should be used is [on] appropriate use, like what should be said, what shouldn't be said about avoiding cyberbullying, which I think cyberbullying is covered in some of our bullying…professional development that we have at the school. I just remembered that, but [PD should be on] using it appropriately, what you should say, and what you shouldn't say. PBS for kids has a great thing for the kids [teaching them], don't share your name, don't share your address, [and] that kind of stuff. But yeah, those are all important things to teach your kids [and] to know professionally.

Participant C recognized that educators' prior experiences influenced their implementation of social media in classrooms. She felt one way of helping them overcome their fears is by having educators share their positive experiences with other educators resisting the use of social media learning platforms because of a few negative experiences. Participant C explained:

That's a really tough question because a lot of times, people's preconceived negative attitudes about social media come from their personal experiences about how other people have used social media…, their fears of how social media is going to pry into their private lives, or other things. Well, I want to respect everybody's opinion. There are people who just really don't like to use it, and they have that prerogative to have that opinion. I guess, to influence positive use of

social media, what could be encouraged is for people who are using the social

media in the school to include [other teachers into their classes].…for example, I

have my ClassDojo® accounts that I use and because I'm the STEAM facilitator

at the school, I get to see all one-hundred-and-eighty kids, and I hook up the

classroom teacher to the class [so they can] see [how I] interact with [students].

So, whenever I post something to the group post, that person can see it also. So, I

think that being somebody who's willing to use social media and who has positive

experiences with it, [needs to] shar[e] that positive experience with other people,

letting them look in on the peripheral to see how it's being used and maybe get

some ideas for themselves about how it could be used. I think that probably would

be the best type of professional development or training to help people who have

negative experiences with social media.

Participant C was aware that negative incidents may occur when integrating social

media for educational use with younger students. However, she felt it would not be a

reason for her to stop using social media for learning. She explained:

It doesn't inhibit me from using social media. [But] other people…[and I] don't

know personally other than [what] people [are] saying, [and] because I know how

some people respond when little things on the playground even [happen]. Okay,

you did this so now…we're never going to play football again because there was a

fight in the football game. So now you can't play football. I mean, they'll do the

same thing with social media.

Educator role: Participant C. Due to lack of PD in Participant C's district, she

had to research on her own based on her interests and needs, "…all the professional

development for using effective social media, I can find through webinars, but I have to be proactive. I have to seek out that professional development" (Participant C). Participant C's experiences with a variety of social learning platforms increased her motivation to implement into her classroom instructional practices. She shared:

My first introduction [was] to Nearpod®, [and] I really like that platform. Since then, [I] have used Nearpod® a couple of times. Kahoot!® was another one. That's a really fun platform. But [during] their introductions, I got to see what kind of help they [were], what the[ir users] did, [and] how…it was used. It really influenced and motivated me to…incorporate some of those in my classroom. I was introduced to Edmodo® through somebody else and really fell in love [with] it. But I guess that was a conference that I went to. So, it influenced my practice because then it motivated me to want to do it also and to introduce those things to my students (Participant C).

Participant C felt that educators need to closely monitor students' communication on social media platforms, being prepared for any loopholes such as private negative comments made by young students. However, the educator should use these negative incidents as learning situations for the youth to prepare them for later in life. Participant C stated:

I think that cyberbullying is one area that educators really need to be aware of because it goes on outside of the social media that educators are using with their students. For example, when I first started using Google® docs, I knew that kids could share their documents with each other, and share [them] with all their friends. On this one [shared] document, anybody can get on [to] access. Well, I

could get into their file and see it too. No big deal. So, [the document] kind of had some supervision, but one thing that I found out [wa]s that there's a comment section. So, in the document itself, you don't necessarily see that unless you're opening the comments. Everything might look fine and dandy on the page. But until you get into that comment section, you're not really seeing some of the stuff that might be going on, that is probably inappropriate since they're trying to hide it. So, just being aware of all the different loopholes that are out there, I think that's an important piece of the training that should happen. The cut[ting] edge [training is] what most of the educators are responding pretty well. I mean, some of them that have that negative bend like we talked about before, [negative comments would] just solidif[y] another reason why they shouldn't be using social media in their classrooms. But in my mind, it's going to happen. I want to provide them a situation where they have that experience. They can fail at it. Failure's not final. I'm not going to close it all off on them. I'm going to teach them. Okay, you did this. Let's pick up the pieces. Let's change this. This is not appropriate…and put them back on the right track. They need those kinds of experiences. If you just take that and say, okay because you did this, we're never going to do this again. They're going to do it [but it is] just going to be in a way that you don't get to see it.

The administration team at Participant C's school was involved in the decision-making process of selecting the school's social media platform for the educators to implement regardless of its features or their opinions. She shared:

I think that the administrators in our school are kind of behind the game on this. I think that most of the social media is driven by other people who are interested in social media. So, for example, one of the members of our social committee at my school has made a Facebook page that's just for the teachers and other faculty members at the school to join or give announcements. The administration got involved, and they decided that we were no longer going to use any of the Google® apps, Facebook®, or anything [else]. [Instead], we had to use Yelp®. So, they said, we're all going to use Yelp®. Everybody needs to use this social media. I don't think anybody uses Yelp®, but that's what our administrators had said. This is our official social media platform. But I don't think that the administrators, unless they're really into social media, are influencing much of what's going on.

Professional development advantage: Participant D. Participant D experienced lack of any or minimal PD provided by her school or district, especially PD pertaining to social media. She expressed:

Other than some of the conferences and things that we attend on a regular basis, there is no professional development available that discuss [social media]. We started the conversation on our campus in relation to social media in the classroom after th[e] conference this year. Only outside the school have we actually received any [professional development]. I mean, other than using Kahoot!® in the meetings, there's no real discussion about using it and how.

However, her district sent their educators to outside conferences, or they attended at their own volition. Participant D stated:

I attended a conference in Orlando called FETC. That was a technology

conference, and it laid out all those different [social learning] platforms. I had

demos from Schoology®, Canvas®, not Blackboard® because I use Blackboard®

in my online teaching. Now I'm using [Blackboard®] at University of Phoenix

[but] we've changed to Blackboard® Ultra.

Participant D attended a Google® conference for classroom educators as a big

push for the integration of all Google® products in her school. Initially, due to the PD

received at this conference, she implemented Google® classroom with her students only

to lose access to Chromebooks® the following year limiting her access to equipment. She

shared:

We had a big Google® classroom push, and the first two years that I came back to

the district, not including the last year, I went to Google® conferences, and I

learned a lot about how to include and use all the Google® [products]. The first

year, I was able to set up a majority of my classes on Google® classroom, and

kind of use it interchangeably with my students. The second year, [my students]

didn't have access to Chromebooks®, so I couldn't use it as much. We could only

go to the computer lab. This year, I have [access to] Chromebooks® again, so I'm

actually going back and using some of [products]. They actually sent us to

conferences and Google® conferences are a lot of fun. You learn how to use a lot

of apps [and] a lot of different platforms to integrate into your lesson planning.

Participant D received minimal PD during all her higher education, including

undergraduate and graduate levels. She explained:

The closest class I had to learn anything computer-related was a computer class, and I remember one of the most complicated things I learned was how to play Solitaire because when I took the class, I didn't know how to play that…on the computer.

Shift in focus: Participant D. Participant D's district started conversations to develop and implement PD pertaining to social media learning platforms. She stated:

The discussion started at the [school] board level, in our monthly rep meetings, and it went back to our campuses, and we shared certain information. It wasn't all social media related, but it was in some ways, directly and indirectly, related to social media in the classroom.

Although the district sent educators to the Google® conference a few years back, Participant D felt there was a need for more PD on other forms of social platforms to increase the digital literacy skills of educators as well as students. Participant D felt that PD on the different kinds of social media and ways to use them in classrooms would increase the integration of social media learning platforms in classrooms as the educators' comfort level or self-efficacy would increase. She shared:

A lot of our classroom teachers use [Class]Dojo®. I consider it a kind of social media tool because it's a platform where [teachers] share information with the parents. All teachers [are] using certain [tools], but it's not clear what we could use exactly and how, so I think the professional development, if made available, could clear some of that up and allow us to actually use it to expand [our] digital literacy skills caus[ing] more of us to be able to implement it in our curriculum [and] across the curriculum. I think [professional development] would increase

[self-efficacy] and make more of the educators feel comfortable. I think [these

are] all connected, and it's like a domino effect. If [PD is offered], I think that

social media use will [have] an up[ward] positive trend.

Participant D associated negative public reactions with the use of social media at

the school level, such as Instagram®. She felt educators could only read the negative

comments made by parents without the ability to respond. As a result, Participant D felt

more training was needed for educators to cope with parents' publicly-stated negativity.

She explained:

We have not had training but we have a [school] Instagram® account

called…Rants or Ranson. Local parents get on this site sometimes, and they bash

the junior high school say[ing] things. We had an incident at our school where

some students took some drugs on their own, and then they ended up in the

classrooms. They got really sick, and we had to rush them to the hospital. The

parents got on that Rants and Raves, and they posted all kinds of [comments]. The

teachers were reading [them]. To me, there is training needed, but there's really

nothing out there. There's nothing that I have seen yet that caters to…social

media. There's nothing to really help us prepare to deal with these things.

Educator role: Participant D. Participant D was acutely aware of her needs as

an educator pertaining to social media use: "I think that [social media] should be made

available to educators…help[ing] us to actually start somewhere" (Participant D).

Participant D searched for PD regardless of what her school or district offered to improve

her knowledge levels and remain well-informed of all technology changes. "Anything

related to my specialty area or anything to drive using more social learning Platforms in

the school…. I'm always searching to improve my practice…. I'm learning it on my own

or through other colleagues" (Participant D). Participant D always had the inner drive and

motivation to learn so she can improve. Whether it was searching on her own or learning

from peers, she asked for assistance. "I learned those [programs] kind of in my own

research.…PowerPoint®, [I] learned from other students" (Participant D). She served in

the learner and presenter role. Frequently, she attended conferences where she presented

alone or with a partner, especially on topics pertaining to game-based learning.

Participant D stated:

> So, all that stuff I'm using more. Recently, I presented at a conference, where one
>
> of my colleagues and I actually looked at a lot of the different platforms that you
>
> can use for learning, and game-based learning. A lot of those platforms have a
>
> social media piece connected to it, and we presented like a lot of different ones
>
> that you could use in the [K-12] classrooms.

One of the most important roles Participant D served was as an administrator of

her charter school. In this role, she researched what social medial platforms teachers

could implement into classroom instruction, like Edmodo®. Participant D's inner drive to

be a self-directed learner helped her overcome the lack of PD provided throughout her

educational career. "I learned about all that stuff on my own as a part of my nonprofit and

trying to open my own charter school" (Participant D).

Participant D's experiences were in schools where administration allowed the use

of social media for informing the public and did not interfere with teachers' social media

use. She explained:

My principal has gotten on board with using social media as a tool to communicate with students, parents, and teachers. They set up an Instagram® page with posts in it. We have a webpage [where] we post [updated] information, and…we're also doing a newsletter, but the principal took the lead on…starting the Instagram® page. I don't really recall an experience where I've heard of an incidence of [administration] discouraging teachers from using social media for educational use. In my own experience, I haven't seen that, and I haven't heard that from any teachers that I've represented, other than the conferences updating and explaining things, and [teachers] realizing that there's a big gray area in terms of this issue and situation.

Discussion of Participants' Responses to Subquestion 2

Three final themes emerged based on the participants' descriptions: professional development (PD) advantage, shift in focus, and educator role. Some participants had exposure and participated in PD at their schools and districts while other participants did not. All participants searched and participated in online PD and conferences outside of their schools and districts. Majority of the participants obtained some exposure to social learning platforms during their graduate education, and none of the participants had any exposure to any technology-related training during their undergraduate work.

All participants cared about students being exposed to social learning platforms and thought PD would be beneficial to educators. They agreed a shift needed to occur in PD to explain what is available to educators, what is age-appropriate for students, and how educators can safely use social media in their classrooms. The shift would permit

changes in educators' negative attitudes and perceptions. The participants wanted the focus to change towards turning negative incidents to learning experiences.

All participants felt educators play an important role in the integration and implementation of social media. PD would assist educators to improve their efficacy in social media use. Positive experiences shared by other willing educators would help change attitudes towards social media. And most of the participants served in multiple roles: administrators, trainers, coaches, conference presenters, and teachers. Most of the participants were early adopters seeking for the next tool to assist them with classroom instruction. All of these were factors influencing the rate of integration of social media.

Descriptive Experiences in Response to Research Subquestion 3

Researcher made efforts to understand the experiences of K-12 educational professionals in using social media learning platforms as a tool to develop learners' digital literacy skills. Participants' responses to interview questions geared to solicit information pertaining to Subquestion 3 helping to understand how K-12 educational professionals' experiences and perceptions with use of social media affected the development of learners' academic and digital literacy skills. The themes emerging based on their descriptions include: development of higher-order skills and digital literacy development.

Development of higher-order skills: Participant A. Participant A felt social media implementation required direct teacher guidance and monitoring to maintain a professional focus for learning. She felt the tool could be useful to all ages, with the foundation of proper digital citizenship and efficacy laid at the elementary school level.

Her personal experiences influenced her determination to continue with the implementation of social media for classroom use. Participant A shared:

> At the educational and professional use, I…video conference with other teachers in a district as big as ours because it used to take us an-hour-and-a-half to get to meetings. Now we can sit at school and meet with each other, and it's perfect. I really feel that those experiences with the digital literacy skills and the social media platforms that we use are just reinforcing my own beliefs of the benefits.

Besides the development of higher-order skills: communication, collaboration, critical thinking, and creativity (Battelle for Kids, n.d.), Participant A felt students benefit greatly through the use of social media by overcoming anxieties or barriers from learning disabilities or native languages while developing character traits of successful adults feeling free to reach out to their friends for help. She explained:

> A lot of times, the students will actually send a message to their friends asking them a question regarding something that's in their Google® classroom … provid[ing] them [with] this open space where they can discuss the lessons or what they're working on like, I'm doing this PowerPoint®. Can you help me? You know, how do I insert…animation? It actually allows them not just to be learners but also to be leaders because while one student may be really strong in Google® Slides, I have other students who are really strong in SeeSaw®, video record[ing], and add things to their video blogs. They see all these things on YouTube®, and they're starting to realize, I can do that too. So, it's giving them that [feeling of] empowerment. It's actually putting them in charge of their own learning.

In Participant A's classroom, use of social media as an instructional tool assisted her students to collaborate through Twitter and Edmodo to communicate and develop critical thinking skills through the process of problem solving of challenging math problems. In these instances, the use of social media reduced physical and time barriers. She shared:

We've actually used Twitter to do a book club. We've set up an Edmodo account with another school [where students] actually share math problems and math discussions with each other. And so, that's helping the students to build their own learning.

Her students utilized social media as a learning community place feeling safe to respond to their teacher's or peers' questions and comments. Participant A explained:

I've actually used Google® docs as well as Google® classroom to pose a question and have students respond not only to my question, but to the other students within the classroom. That starts to generate building of knowledge increasing their comprehension of specific skills or standards within science.

Digital literacy development: Participant A. Participant A provided students with experiences in the use of technological tools to develop a foundation of their digital literacy and citizenship while improving their confidences in their skills and learning abilities. Also, she provided students with choices in preferred mode of practice or assessment. She shared:

I love when my students are given options [on what] they want to do. They can choose like a slideshow, or they can do a digital presentation where they actually

record themselves presenting. I really feel that those experiences helped to build their confidence as learners.

Table 5 displays the variety of experiences in the development of Participant A's digital literacy with supporting quotes exemplifying experience. Digital literacy experience is listed on the left column, with supporting statements from Participant A listed on the right column.

Table 5

Evidence Supporting Digital Literacy Development

Digital Literacy Experience	Evidence to support the experience
Chat Room Development and Use	• I've actually had a couple of students who have now started looking into World War II which they were very interested in. They started this chat room, and they're getting their classmates involved in it (Participant A).
Email Use	• They've started…sending [email] messages to each other. It's not just, how [are] you doing? It's, did you figure out what the problem was on this assignment, and can we text (Participant A)?
Twitter Use	• In terms of reading, we've actually used Twitter to do a book club (Participant A).
Edmodo Use	• We've set up an Edmodo account with another school [where students] actually share math problems and math discussions with each other. And so that's helping the students to build their own learning (Participant A).
Google® Apps	• I've actually used Google® docs as well as Google® classroom to pose a question and have students respond not only to my question, but to the other students within the classroom (Participant A). • One of the ways that help with their digital literacy skills is the students will actually send a message to their friends asking them a question regarding something that's in their Google classroom (Participant A).
Video Presentations	• They can do a digital presentation where they actually record themselves presenting (Participant A). • I have other students who are really strong in SeeSaw®, video record[ing], and add things to their video blogs. They see all these things on YouTube®, and they're starting to realize, I can do that too (Participant A).

Note. Sample evidence is listed by experience.

In each experience, Participant A's students used technological tools to develop their digital literacy skills. These varied experiences helped them to improve their self-efficacy in higher-order yet essential skills. In the chat room experience, students collaborated and communicated with each other in a self-directed learning situation. Participant A's students were able to overcome physical barriers to communicate, collaborate, and critically thing through challenging math problems. Her students knew when and how to reach out to their peers for help. Participant A provided them with opportunities to showcase their learning through the use of video presentations.

Development of higher-order skills: Participant B. Participant B explained how students can use a variety of media for writing purposes creating content developing their thinking skills. However, educators need to monitor the content providing students with an awareness of consequences about their actions. Participant B stated:

Any time you give students access to any kind of media, whether it's social media or not, where they can actually create the content themselves, they really need to know there are consequences for everything they do. I think they just don't understand consequences all the time.

Participant B felt students with special needs can benefit from the use of social media to research images on the Internet to include in a document for communication purposes ensuring increased and equitable access to technology and increased digital literacy skills. She expressed:

Social media platforms can really improve a learner's digital literacy skills. For example, I have a girl in class, who is autistic, and just her ability to take a picture from the Internet, and use it in a document, or even just to save something from

the Internet to her files, and then to use social media to communicate what it is

that she wants to say has helped her tremendously. She's grown leaps and bounds

since August in her research and communication skills. Sometimes, you know,

her spelling is not that great, but it is improving. She also has the ability to talk

her answers into her device, which is making her a much more capable user of

media and of technology.

Participant B engaged students in a variety of activities through a variety of media

to increase their overall academic abilities while developing their digital literacy. She

shared:

Any social media platform, when they are willing to participate fully, is going to

do a better job of increasing achievement and digital literacy. So anytime they

have to write a response, whatever the platform is, whether it's a learning platform

or a Google® form where they're taking a survey, they will learn more. The more

interactive the platform is, the more meaning they will make, [which] is going to

increase achievement and digital literacy more.

Digital literacy development: Participant B. Participant B shared an example of

her daughter's Biology class experience where the teacher asked them to collaborate in

teams to create a video presentation on a specific topic. While these students used higher-

order skills of communicating and collaborating, they produced a video increasing their

digital literacy skills in research, curating of content, and use of technological tools. She

stated:

If we open our minds to different ways of evaluating students, social media can

really help students demonstrate what they know. We had one biology teacher

that had students work in teams. I'm trying to remember. My daughter did this when she was in high school, but they created videos on different scientific concepts. I can't remember what my daughter's [project] was, but one of the groups of kids did the scientific process. So, they did great jobs, and then they uploaded the[ir videos] to YouTube®.

As a technology teacher, she took pride in exposing her students to a variety of activities involving technology through social media to develop their digital literacy skills. Her students worked on their higher-order skills in combination with their digital literacy skills' development projects through research, communication, and collaboration with a large emphasis on giving proper credit to sources. Participant B explained:

When we go back [from break], in Interactive Media [class], we will be making movies. In Digital Applications [class], we are going to [MS] Word®, and in Programming [class], we will be doing C++ [coding]. So, as far as digital literacy skills, my kids are using them all the time. They are always around a device. And for [one of] our classes, we're going to take images from the Internet and use them. So, some of that [process] is [about] citing your sources of whatever images. Kids think it's out there, I can just use it. Well, no! That's somebody's knowledge. [I say], you need to give them credit for whatever it is, whether it's knowledge, artistic work, or opinions even.

Participant B further stated:

I use my digital literacy skills all the time, from curating content to the way I present it, whether it's on Canvas or in-person. Students will need to be aware, if you're using something from a different source that you just haven't made up, give

that source credit. As long as we can keep our students on task, I think social

media is such a huge part of digital literacy these days and for the foreseeable

future. I think we would be silly not to use it for educational purposes.

Development of higher-order skills: Participant C. Participant C focused her

students on the academic task and collaborative effort in assisting each other when they

faced difficulties. She also taught her students to ask each other for help requiring them to

understand what problem they were facing in their learning process and articulate that

thought to the peers or teacher through social media. Participant C shared:

I have positive experiences with the use of social media. What I tell my students

is that when we are using things like Edmodo®, SeeSaw®, or whatever platform

that I choose to use, the conversation needs to stay academic. It's not really about

their birthday parties and other things like that. It's about what we're doing in

school. What are you learning? What are you excited about in school? If you see

something that your friend is writing about, how could you encourage them? If

you're stuck on something, and you want to ask a general question to two people

in particular, go ahead and say, does anybody know how to blah blah blah

because…that is…pretty much what social media is there for our educational

purposes.

Participant C engaged students in collaborative engineering projects to ensure her

students' learning experiences focus on higher-order learning skills. However, she

experienced difficulties when students lost access to the Internet or their devices. She

worked closely with the administration to show them the focus of the project asking for

her students' access to provide equitable access to her engineering project. Participant C explained:

> [The incident] was dealt with the people that pertain to directly. At that time, the
> project that I was doing with the students in the fifth grade, they were not actively
> using their social media because we were doing an engineering project. I had
> limited students using the media to share with family members the whole group
> progress, and those students…using the media were approved. So, [my principal]
> just went through [the lesson plan] and said, talk to me about what you're doing. I
> told [him] the people that were using the equipment and he said those people are
> fine. So, then for me, I didn't really have to go into any further detail because if
> there were any restrictions, the other [students] were not using the equipment at
> the time.

Participant C's students discovered information about the school's namesake around the 90th-anniversary. They decided to use their collaboration, communication, research skills, and creativity to create a presentation in honor of their school's 90th-anniversary celebration. She stated:

> Just recently, my students…had a period of time where we were putting together a
> [presentation for] the 90th celebration of our school. They [heard] this rumor
> going around [about the] namesake [of] our school. So, they have…to do a lot of
> research [to] put together some things, but they use social media to collaborate.
> So, they…had a Google® drive folder where all of the information went in. They
> had slide shows that they were collectively working on different parts of it. They
> had…a brochure…[with] the itinerary for the celebration. So, they were

collectively working on this and different people would work maybe at the same time or different times. But yeah, they used social media to put together a collaborative product of our 90th[-anniversary] celebration.

Participant C embraced social media because her students were excited about using them to showcase their wonderful work to their parents looking for some positive reinforcement. She also felt that using social media to maintain records of learning experiences helped the parents communicate with their children what they had learned at school. She explained:

My perceptions are that social media platforms are very positive tools because kids are excited about them. They…want to share what they're learning. They…want their parents to be involved. I like…when kids are excited about what they're learning. Without being prompted, they're going over to their iPad, getting on their social media, and taking a photo of what it is that they're doing and sharing that with their parents. They're looking for that…thumbs up or positive feedback. I think it's a good way to communicate between the school and the home because how often do you get kids when you come home and you're having dinner with them and you [ask], what did you learn at school today, and they [say], I don't know. They just can't remember, or it's just so long ago for them. But if you pull up social media, and you say, I saw this really cool thing that you did. Can you describe some more about this to me? It's just a talking point that opens up…further discussion.

Digital literacy development: Participant C. Participant C involved her students in developing their research skills while obtaining self-help using Instructables® website.

She had her students research, use, and create their own tutorials to learn and teach how to use or make things. Participant C stated:

Instructables® is a website where people make something, and they write instructions. They could be video instructions or whatever, but it helps [and] teaches people how to do something, for example sewing a puppet. So, a child in my class might say, I really want to make a puppet and do a puppet show, but I don't know how to do this. So, they go on there, and they find how to make the puppet. They watch [the tutorial], and [they] make their puppet. And then, I asked them…if they watched an instructable® and…[made] something…, then they had to make an instructable® also. So, they watch this and as they're making their puppet, they take pictures…and give step-by-step [instructions] of how [they] made it. I think that using social media, people can get answers from others. They can find tutorials about things that they're interested in, and they can also feel like they're contributing to that knowledge by putting back into this situation. I think this really increases academic achievement because I'm empowering them to be self-determined learners.

Participant C lived her life immersed in technology making personal efforts outside of work to learn about other tools to increase her own digital literacy skills with a focus on how she could benefit her students' digital literacy skills. She shared:

You should see my desk right now. It's full of digital stuff. Most of my [learning] experiences…come from me. I'm interested in this, and I know that kids are interested in this, so I push myself. Right now, I've got a computer kit, that you can buy that has a Raspberry Pi®, a screen, and a wooden case. The…kids…build

[the computer] themselves. They put it all together, and on the Raspberry Pi®, it plays this program that is a modification to Minecraft® where the Minecraft® game teaches them how to hook electrical components up to the Raspberry Pi® computer. They're controlling their game through these buttons and wires that they have programmed into the kit. Robotics is another aspect [of digital literacy]. The kids use a lot of iPads in my classroom where they're …coding [using] Scratch®. I went to a Scratch® conference over the summer and learned some coding skills that way. They're coming out with a new beta Scratch program that can be played on an iOS. I just think exposing them to lots of different things like robotics, computers, and iPads builds [their] digital literacy. They get more comfortable, and they understand that the monitor is not the computer. It's the CPU unit or the Raspberry Pi® unit that's actually [the computer]. I've had some kids program [using] Arduino®, which is a little breadboard that they can program to…make a light blink, or…to build a robot with, that's a little bit more complex.

Participant C's personal efforts to stay well-informed on the newest technological tools was based on her personal beliefs in the power of using tools like social media for herself and her students. She explained:

I think that social media platforms are a great method of developing digital literacy because, first of all, I like the fact that they're protected, that the kids get some experience with these before they actually develop their digital footprint…like with Facebook and other things that aren't as a closed system like the SeeSaw® or ClassDojo®, [where] they learn the impact of what they say and

what they do in public ways so that they can make better choices in the future. I also think the exposure they get and that interaction they have with the social media platforms are just healthy for them.

Development of higher-order skills: Participant D. Participant D encouraged the use of social media and other technological tools to help students develop their academic and digital literacy skills. However, she was not always comfortable with the use of social media due to experiences shared outside of the school. She encouraged her students to research topics using whatever tools necessary. She stated:

My perceptions are that we can use social media for educational purposes in positive ways. I think that it is risky because it's such a gray area with what we should and should not do, but I don't think that should deter us from using it for educational purposes. So, I think that I have a positive attitude towards it. I have a positive outlook, and I will continue using it to the best of my ability, but I'm not always very comfortable using certain social media, because of the different things that we experience outside the school that's not related. And in terms of digital literacy, I think I try to encourage the students to use their phones or whatever type of electronic device they have available to research things that they may not know very much about. In science, [we] have to learn APA© [style], and I'm always combating with the English teachers' MLA [style]. So, they're learning both writing styles.

Participant D used social media to have students access game-based learning to review Science content they had already learned in class when they experienced

difficulties with it or when they needed to enrich learning by exploring the content at a deeper level. She explained:

I implemented this particular program that you can use to play games to increase your content [knowledge by] review[ing] the content, and you can access it from your phone and home. You can access it for homework [for example]. So, I think that different programs that are available for use both on the computer and [through] social media or mobile [devices] can increase student achievement if used on a consistent basis…and the students are engaged in it. And the particular example is [a] learning program called Legends of Learning®. It's free, and there are different content areas available. I use it [with my] Science…students to review content and learn a little bit more, and go deeper into the content by playing different types of games. I looked at the data…to see if…they're doing well with the [assigned] content that they've already been exposed to, but they're not doing so well [with it].

Digital literacy development: Participant D. Participant D found ways to get her students to learn about content and communicate with each other exploring different perspectives about events local or around the world and how they can relate to their environment while developing their digital literacy skills. She expressed:

I think that social media platforms would be a great way to help students increase academic achievement and digital literacy. I'm always finding ways to actually show that this is a good way to go helping students achieve and learn more about their environment. I use CNN® 10 News, which is the student news, to help educate them more about what's going on both nationally and internationally. We

watch the CNN® 10 news, and we discuss the different things that [are] going on, and how [they] relate to what they're [learning]. CNN® [10 News] is a great tool to help…increase [students'] digital literacy [skills].

Participant D worked to improve her digital literacy skills beyond what she was trained by higher education or employment sites. Over time with continued use, she had created her own opinions about the efficiency and ease in using the variety of tools for education or personal use. She explained:

I use GoToMeeting® and other conference platforms. They all not all created equal. GoToMeeting® is pretty easy to use. So, I always look what's out there to help improve [my digital literacy skills]. I'm always doing research via the libraries that I'm connected to [through] my online program. I'm almost always looking at ways…I can implement more technology in my classroom using learning platforms or social media tools to help myself and students learn more. When I do research, I'm either using it to influence what's going on in my classroom…, I'm using it to help improve my practice or market myself better.

Discussion of Participants' Responses to Subquestion 3

Two final themes emerged based on the participants' descriptions: development of higher-order skills and digital literacy development. All participant had varied experiences in their personal and professional uses of social media to develop students' higher order skills: communication, collaboration, critical thinking, and creativity. In each case, the educators' personal opinions on the safety and benefits of social media in instruction led to the varied types of lessons or activities and development of higher-order skills with academic achievement as the main focus.

The development of digital literacy was made possible through the uses of higher-order skills and social media maintaining a focus on academics. The projects developed students' skills in coding, engineering, uses or building of technological devices, creation of videos, research, etc. The participants varied in the ways the types of tools or projects they used with their students. Most participants focused on software and hardware knowledge development to best-prepare students for all upcoming life experiences as adults.

Descriptive Experiences in Response to Research Subquestion 4

Researcher made efforts to understand the experiences of K-12 educational professionals on the development of policy on the safe and appropriate educational use of social media learning platforms. Participants' responses to interview questions geared to solicit information pertaining to Subquestion 4 helping to understand how K-12 educational professionals' experiences and perceptions with development and implementation of policy affected the safe use of social media for learning. The themes emerging based on their descriptions include: level of educator involvement and legal and ethical considerations.

Level of educator involvement: Participant A. Participant A felt the district enlisted her input when it first developed its social media use policy. However, the process has not occurred since that original request for participation. She stated:

At the moment, they have not updated the social media policy in about five years. Five years ago, we did have some input. I hope some of it was productive. It was more of a survey asking questions like: what do you see, and how would you

relate. [Also], there haven't been any local or state level town hall meetings regarding any policies at this time.

When it came to enforcement of the policy, Participant A felt empowered to address issues as they occur. She used incidents as learning experiences for her students. Participant A believed the policy was appropriate to ensure an academic focus on social media's uses in classroom instruction. She felt supported by the actions her school's administration team took to address any negative incidents. She shared:

Social media is applicable for learning purposes with our students as long as it is being used strictly for academic subjects. At our district level and our school, we really push that social media is strictly for your classrooms and that you're using it to connect with your peers at a professional level. I feel I have a really good understanding of our social media [policy].

Participant A further shared:

In the case of our little friend, we actually locked his social media account with the district so that we could get the school police involved because he had made terroristic threats. Our administration actually expelled him because of the level of threat that he was posing to the other students. Most of the time when they're using it inappropriately like they're sending their friends a text message, usually they lose the privilege for half a day. They get numerous chances because, like I tell them, we all make mistakes, but it's when you keep making them, that it becomes a problem. I think our policy was really strong. A lot of the students saw what happened to this student, and they realized the severity of the situation because to them and even to the student, they thought he was just being funny. As

I told him, you can't make those kinds of jokes. That's not funny, but you put it in writing, and it's out there in the World Wide Web. You shared it with a lot of people. I think for the students, it really hit home about appropriate social-media use. And in terms of our administration, they were right on top of it. So, it showed me that they were up-to-date, and they were current with all of our policies and procedures.

To secure a safe and healthy learning environment, educators should be made aware of the policy and its contents. Participant A felt without professional development provided to teachers to know and properly implement the policy, students' safety would be a concern regardless of the qualities of the social media use policy. She expressed:

I think in the schools and classrooms that rely really heavily on technology, social media use policy is being implemented and enforced consistently, I think in some of the other classrooms, perhaps not quite as much. I've had a few teachers ask me, what do you do with kids that [use their phones in class]? I tell them their phones should be put away, [which] depends on how much the technology is embedded in that classroom or in that school.

Legal and ethical considerations: Participant A. Participant A expressed her understanding that social media access and the rules guiding implementation could be guided by the age group of users. She felt there was a need for caution and supervision with the younger students while their digital literacy and citizenship was still developing, and to ensure their safety, schools need to provide training to parents guaranteeing online safety at school and home. She shared:

For legality, because we work with minors, we really have to be conscious of

social media platforms that are open to the public. We need to keep those social

media platforms, especially with the younger students, a little more closed in

terms of who can go on and share them. That also falls under ethical

considerations. Also, we need to ensure we're educating our parents as well. I

think a lot of times, parents will let their kids go online or put their kids on their

phones not realizing that they're actually putting [their children] in a pretty serious

situation because there are a lot of scary people out there on the Internet.

Strong policies define terms and the role each stakeholder plays in the safety of all

involved. Participant A felt that a strong social media use policy offers clarity with

definitions of terms and roles of students and educators assisting in the development of

safe and productive student-educator relationships. She expressed:

If the [social media] use policy is strong and clearly-defined for both the student

and the educator, I think it's going to keep that relationship professional and it'll

make the students realize, I can't send a text to my teacher telling them, they're

poopoo head. Also, a teacher can't reply back to a student [saying], I can't believe

you did that or that's stupid because a teacher should never send inappropriate

stuff to a student. By having a policy for social media use in place, it protects both

the teacher and the student making that relationship more positive, productive,

and less ambiguous.

Participant A felt strongly in assisting her students when they struggled with

homework, especially when multiple students experienced the same struggles. Her social

media use allowed her to monitor their questions from the comfort of her phone and providing a quick response to keep students from getting frustrated. She stated:

> A lot of my students when they're working at home, for help with their homework, they'll shoot me messages, and they come up on my phone say[ing], Dr. A, I'm not sure about question 5. Can you clarify for me? Having social media, another student might say, I was having that same problem. It lets the students know that I'm there for them even when they're not at school. So, it actually solidifies my student-educator relationship and makes it a much more positive one.

When it came to putting blame on social media for the few inappropriate incidents taking place in education, Participant A felt the causes were the individual's morals and upbringing, as these types of behaviors have occurred prior to social media development and implementation. She explained:

> I know a lot of people will blame [social media] as the root cause of inappropriate student-educator relationships, but really these relationships were going on before social media platforms were even developed. I think it's just a few bad apples that really spoil the bushel. So, I think if students and educators are trained in it, and if you have a strong policy in place to protect those individuals, then those kinds of relationships, even if they do show up, they should be very few and far in between. And they're more indicative of the educator or the student, their own social morals and their own social upbringing.

Level of educator involvement: Participant B. A negative incident occurred in Participant B's school where some girls crossed the line with the use of technology. The

school felt the police needed to be involved. As a result of this incident, the superintendent, acting alone, prohibited uses of phones and stopped access to many tools during the school day. Participant B shared:

> Well last year, we had some girls taking inappropriate pictures and then sending them to their boyfriends. Their parents got involved, and then the school principal and assistant principal got involved. Ultimately, they brought in the County Sheriff to talk to these kids about [their actions] and that this comes with some severe penalties. Not too long after they talked to those students who are involved, we had an entire school convocation where they came in and talked to everybody. Our County [Sheriff]…and the state police reminded these kids…[that] this stuff never goes away. Well, one of the things that came out of that situation was no phones in the classroom, in the locker room, at lunch, and before-and-after school. Facebook® and Twitter are disabled on their devices during school hours. Our superintendent just decided we're going to avoid as much as we can, and we're going to limit its use during school hours. Even YouTube® is limited in some classrooms, and that is a teacher-specified limitation through the use of GoGuardian®.

Participant B knew about her district's policy with a bigger focus on safe Internet use, not just social media use. She shared the consequences of violating this policy causing teachers additional duties of addressing students' learning needs while respecting their consequences. She stated:

> What I know about our Internet policy, in general, is if you do something that is contrary to our policy, whether it's bullying or trying to get to inappropriate

websites or cheating on a test, then student basically loses Internet access but not

necessarily access to Canvas. So, they can go to Canvas, but that's the only place

they can go. So, some of [this] makes it challenging for the teacher. [For

example], if you have a student that's lost their [access], and they can lose their

device too, they can't go do something that [their teacher] wants them to do

online. Teachers have to find an alternative way to deliver that same content.

At the school site, Participant B's administration involved teachers in providing

feedback to policy they created based on teachers' perspectives of its effectiveness. At

times, teachers presented their lesson plans to the administration for special permission to

release certain sites for a temporary period of time for educational use. She shared:

Our administrators will develop the policy, and then they'll bring it to the

technology committee, and say, what needs to be changed here? How do we

enforce it? So, that's how the teachers are involved. Another thing that we can do

is ask for permission to open up sites that we think are educational. We can have

them opened indefinitely, like Pinterest, or we can say, I need this site for a week,

and here's what my kids are going to do with it. And then, they'll open it for that

that amount of time. As far as local or state level town hall meetings, I am not, I'm

not aware of any. I mean, they're probably out there. I'm not aware of any.

Although Participant B understood the policy well, she explained that the

administration team was mainly responsible for its implementation and monitoring. She

explained:

I'd say, it's hand-in-hand being implemented and enforced. I know our

administrators have the ability to see what everyone in the building is doing at any

specific time with their device. So, at the high school, our principal is really good about dropping by a class, and talking to a kid, or pulling them out in the hall and saying, you know you can't do that.

Legal and ethical considerations: Participant B. Participant B shared the importance of privacy when developing a policy. The laws pertaining to educators protecting the privacy of students with special needs was the primary factor to consider. She explained:

Privacy, I think, is the biggest consideration when you talk about social media privacy policy. We have, just like any school, we have our share of Special Ed[ucation] students and students with [Section] 504 plans, which is generally an emotional kind of plan to keep the [student] on track. So, making sure that all adults are aware of those, and what those things entail and mean, and, and how that information should be treated, I think that is, that's a big consideration.

Participant B considered safety of students as very important as well in the process of social media use policy development. The policy should be clear providing guidance to students and educators on what is and is not appropriate. Participant B expressed:

Our student [safety] always comes first, so I think that [the] policy has to describe what is a proper relationship: how do you know, how do you keep from giving a student the wrong idea, or how do keep a kind of a safe distance, [and] I don't mean geographical distance, but it's emotional distance between a student and an educator.

Participant B did not blame social media as the root cause of negative incidents taking place. Instead, she explained inappropriate relationships may occur due to other reasons unknown to her. She shared:

Well, I don't blame it. I don't think it's the root cause. I'm not sure what the cause is, but I wouldn't say that social media is the cause. I'm sure there was probably something else is going on. And again, I'm answering this from the point of view of a classroom teacher, where the kids come to school every day. So, I guess my experiences aren't necessarily based on social media, as much as they're based on seeing the kids every day in the class[room], in the hallway, at lunch, and after school at practice. I would not say that social media is the root cause because there's something else going on.

Level of educator involvement: Participant C. Participant C believed that personal opinions varied among educators in terms of ways educators engaged students. She felt the focus should remain on productive academic work to maintain professionalism. Participant C also felt multiple perspectives should be taken into consideration when developing a policy. She expressed:

It really is a matter of opinion. For example, I…might have the opinion that it's really important that I keep my class conversing with academic purpose but somebody else might say, I really want my group to learn how to type and so in our typing we're going to use social media to practice our keyboarding skills. I'm really not a judge for the inappropriate use for social media. The only thing that I think would be inappropriate is…if it crossed that boundary of what's professional, like if I started using it for personal [reasons]. I don't know that I

want to be the one that's go[ing to] say, was the comment that you made really

personal or was it just because you're trying to reach out to that parent because it's

important to have a good have good rapport with [parents]. I guess whatever gets

decided by the district, there should be lots of different people represented. And if

you really have a strong opinion for or against, you really ought to be involved in

those discussions.

Participant C was directly involved in the development of her district's Internet

Use policy. The policy was implemented with fairness and discretion by the school

administration. She stated:

The social media policy or Internet policy that was first written in our district, I

helped write. We basically looked at some of the things that other people put

together in other districts and developed it from there. I don't know of very many

changes that have been made to it since then. I've been off the committee for

probably five years now, and it seems like it's still pretty similar to what we first

put on. I am not aware of any local [or] state [level] town hall meetings [for]

development of these policies. I'm not really sure that I would be interested in

helping develop those anyway.

The policy at her school and district had a wider focus than just including social

media. Additionally, the policy was well-communicated with educators, students, and

parents. Her direct involvement in its development resulted in a very good understanding

of the policy. Participant C explained:

[Our] internet use policy, not necessarily social media, but it would cover that,

basically talks about appropriate use and inappropriate use, such as, no

cyberbullying, and not using the Internet or social media for personal gain or profit. [The] kids sign it so they know what the expectation is. They [take] that paperwork…home. The parent and the child have a conversation about what the school is expecting. It gets signed by the parent and the child, and [child brings it] back to the school. Once those are all in, the child is then able to use social media [and the] Internet. The teacher reinforces what is said in that [policy] throughout the year by either providing mini lessons, reminding them of things that they…signed, or enforcing the policy if need be.

When the Internet policy was implemented or enforced at Participant C's school, it was done with discretion focusing on the individuals involved in the incident. The school did not react to the incidents by taking drastic actions like removing all access to all Internet-based tools like social media. She shared:

There was a situation at our school where a child was getting bullied through social media…[outside the] school. [Other] kids in the school bullied [the child] using personal social media. The child went and showed the principal, and it was held handled very discreetly. The students involved were talked to individually. The parents also were involved in the situation, informed of the situation, and because of that [incident], some training happened with the fifth-grade group [involved]. I think that they handled it very discreetly with the students, parents, and even staff. The only consequence I think was directed at the offending parties…[with] no backlash like we're shutting down all social media. It was mostly, you did this, you may not use these things while you're on campus.

Participant further shared:

I think that it's being implemented and enforced fairly well. The…nice thing about our policy is that it is not so tight that it doesn't allow room for flexibility of different things. For example, we don't encourage children to bring their own device because we don't want it to get stolen but we do allow children to bring their own device if they want to and the parents are supportive of that. We do provide one-on-one devices for all of the students so, they do have devices to use. I think that our district does a great job of allowing social media, and trying to keep kids safe without knee-jerk reacting and closing it all down because of one or two people who abuse the system.

Legal and ethical considerations: Participant C. Keeping students safe whether they used social media or other tools was Participant C's primary consideration. The educators' responsibilities were to ensure the students learn while they are kept safe and taught how to properly use tools so they can continue to be safe as adults. Participant C explained:

> [The number one] ethical and legal consideration that should be followed is that kids should be protected. The whole idea of using these platforms in the school is to train the students on appropriate use, and help them become responsible digital citizens.

Participant C felt the main role of social media tools were to increase students' academic achievement levels and improve their digital literacy skills. She expressed that anything else outside of the professional academic use of the tools was inappropriate, and the only way to reduce the number or possibility of occurrences of negative incidents was through parental involvement. She expressed:

[Social media use] should be for academic purposes, not for anything more than educational based. So, if an educator is not using this as a reminder of assignments or talking about what's going on in class, but instead, do you want to come over to my house. That does not seem like a good use of social media, and the child really should be protected from that. But I don't know that this needs to be written in a social media policy because if anybody is doing that, really shouldn't have their educator license in the first place. It's not appropriate as just as a professional whether you're on social media or not. It's totally your code of honor as an educator, your professional code of honor that this wouldn't happen. But that doesn't mean that everybody follows that.

Participant C further explained:

Social media is there for communication purposes. It's for the teacher to communicate the expectations of whatever it is that the educator is there to impart to the student or draw out of the students. It's also there for, the younger age level, parents to get involved. I really don't know how high school students would feel about having their parents looking at that. It might be a little too much by the time they reach high school. There should be a little bit more trust there, but at the elementary level, I think that it's really important to have that parent-student-teacher kind of thing so everybody knows what's being said. I think that if people are afraid of [anything negative] happening, then there should be that connection to [their parents], so that…anything that I say to one of the children in my class, their parents get that information also. So, my conversation socially to their child is not private to them, it doesn't exclude them. Having an open forum like that

helps eliminate any of that hidden conversations because that's where [inappropriate] things can happen.

Level of educator involvement: Participant D. Participant D had limited personal involvement in creation of policy. However, she did serve as a communication bridge between discussions made about the policy and teachers at her school as their representative. She stated:

I'm not involved beyond the point of being a rep in sharing of information with the teachers as it changes in relation to the subject of social media use for educational purposes. I'm not aware of any town hall meetings. I just know that we have [California] Ed[ucational] code, and I don't know if they're going to add to the Ed code or change [it] to include a policy for this. As of right now, there's talk around the campfires. But where it's going, I'm not sure.

Participant D's level of understanding of the policy was not clear. She thought the policy must clearly define what is and is not appropriate. She explained:

The policy that they have in relation to social media is just…not clear. I don't even think there's a clear policy related to actual social media use. I think it's more of a generalized policy, and the language has to be changed.

Participant D believed there was an increased use of social media for educational and personal reasons. However, at their school, social media served as a tool to research issues they had with increased student fights leading to changes made to rectify the problem. She explained:

I think social media use has increased. So, for us this year, we've had a big problem with fights. We're on a temporary campus, not necessarily [with] things

happen[ing] in an orderly fashion. Students would have fights, and…we changed

things…, [and it] helped a little bit. A lot of the information that we gathered

[about these incidents] came from whatever was posted on social media.

Despite the use of social media to assist educators with the fighting problems they

were experiencing, participant D felt that a policy would clarify to students, educators,

and parents what they must know to do their jobs successfully maintaining positive and

productive student-educator relationships. She expressed:

A policy would allow us to know what's black and white in terms of social media

use, and help us to feel more comfortable about using social media to implement

it in the classroom. And, it will help improve our relationships with our students

because we'll have more information to share with them to help them better use

social media. A part of the problem has become that students don't really

understand how much the use of social media impacts the rest of their lives. Also,

it allows us to communicate about our educational experiences allow[ing] us to

communicate with each other in terms of student needs.

Participant D explained that she has only had positive experiences with her

students. They have communicated with her appreciation they felt for her contributions to

their learning and academic progress. She shared:

I guess it depends on how you have used social media with your students. I have

not experienced a negative relationship with students…on my social media page.

You basically see what they're doing, or what they are posting in there. I don't

always get any direct communication from students unless it's teacher

appreciation week. One of the students reached out…saying I was one of their

best teachers, and…shared a video with me. So, I think that there [are] some inappropriate student-educator relationship experiences, but I think there's a lot of good ones, and I wouldn't say that social media is to blame. Social media is just the new wave of communication that we all need to learn how to respect and understand how to use to the best of our ability[ies] so that…we're not doing things that can cause problems for other people.

In Participant D's experiences, administration was mainly responsible for maintaining the safety of students. Their actions depended on the type of incident taking place. She expressed:

We usually have an assistant principal that deals with discipline and one of the biggest inappropriate uses of social media would be students videotaping, watching [recordings], showing [them to] other people, or posting them on the web. Usually, our administrative team deals with these things. Usually, students want you to see the fights, [but] we're not really allowed to watch them, or we become implicated at that point. The administrative team, once we report it, gathers information using resources from teachers. [Once] we share [information] with the admin[istration], they deal with it from there. {They act on a] case by case [basis]. Depending on the situation of the case, it's shared in the staff meeting. Depending on how important it was, or how [it] impacted the school overall, then, we deal with in a staff meeting [accordingly]. The only real policy that we enforce [with] the students [is for them to] not able to use their cell phones in class. There [are] consequences if they take them out, use them, or answer them. Basically, that's about it for right now. We're not enforcing a whole

lot, but we are looking at it and trying to figure out exactly what we wanted to

cover in [the policy] that's not really clear.

Legal and ethical considerations: Participant D. Participant D felt there was a

lot to consider legally or ethically in the development of social media use policy. One of

the primary legal rights to consider was freedom of speech. She stated:

We have a lot of ethical concerns that we voice and discuss, but whether or not

they're there in the policy, [it] is questionable. [Similarly], what's actually legal is

also questionable. I think that we should…look at freedom of speech, and is it

posted on social media tools a part of that. So, how [should] those things be

considered as we go forth in trying to understand what's important to include [in

the policy].

Participant D cautioned on considering guidelines in helping people to respect

others' rights and opinions. She felt that terms and rules should be clearly defined as in

many laws enforced. She felt it should also be clearly explained in terms of how it can

apply to varied scenarios to better assist educators in integration of social media for

educational use. She stated:

I think that ethical considerations should be focused on not offending people. I

think we should have some clear guidelines and instructions of what is

appropriate and what isn't. I don't think there are any real…educational resources

available to say what's ethical and what's not. I think there needs to be a

committee…to clear this up and show…what's ethical and what's not, and give us

scenarios. [We need to] have people start talking about it because I think people

are just doing whatever they want.

Discussion of Participants' Responses to Subquestion 4

Two final themes emerged based on the participants' descriptions: level of educator involvement and legal and ethical considerations. All participants felt safety of students was a priority because they cared about their students. The opinions focused on teaching students how to safely express their thoughts and learn while developing the foundation to a positive future digital footprint.

Participants' experiences varied in the enforcement or understanding of social media use policies. Many times, the administration was the main enforcer. In some cases, the educators took an active role in educating students about safe and respectful social learning environments. In some cases, participants were unclear about existing policies and had little involvement in policy developments. Others, on the other hand, had first-hand experiences in contributing to the policy' developments. The educators involved in policy development experienced higher positivity towards the policy, its enforcement, or the use of social media in classroom instruction.

Summary of Findings

Chapter four presented the findings of this phenomenological study on the educational uses of social media in K-12 educational setting. The findings were based on the lived experiences of educators directly involved in the use and implementation of social media learning platforms in K-12 public education schools in roles of teachers, administrators, or specialists. The findings were presented based on the researchers' interpretations of participants' lived experiences and perceptions of the phenomenon of social media learning platforms in classrooms to enhance academic achievement and digital literacy of learners. The researcher provided a summary of the data collection and

analysis processes and the reporting method of the findings. The final themes were: improving learning experiences, safe social-media use, professional development advantage, shift in focus, educator role, development of higher-order skills, digital literacy development, level of educator involvement, and legal and ethical considerations. In Chapter 5, the researcher will interpret and discuss emerging themes as relating to existing and future educational practices and future research.

Chapter 5: Discussion

Introduction

      The aim of the phenomenological study was to understand the perceptions and experiences of K-12 public education professionals during integrations of social networking platforms for improved academic achievement and digital literacy. Participants enlisted through Association for Educational Communications and Technology (AECT) as membership benefit were teachers, administrators, and instructional technology professionals within K-12 public school districts responsible for having implemented 21st-century technology skills into classroom instruction. Data were collected using online interviews and analyzed using Interpretative Phenomenological Analysis (IPA) methodology. Roger's Diffusion of Innovations Theory served as the conceptual framework for the study.

      Chapter five is the analyses of data presented in the previous chapter. As the study was a qualitative phenomenological model and the researcher undertook sound solicitation, collection, and organization of data, the analyses presented are of presiding themes and trends made evident by use of recurrence tables (Smith et al., 2009). When data present issues of certainty, the researcher will so note. But when the data only enables inference, the researcher will so note. Chapter five will also include self-determined limitations of the study and recommendations for further actions of discovery.

Overview of the Study

      Life demands require adults to be academically and digitally literate (Pimentel, 2013; Short, 2012), yet current K-12 classrooms do not meet 21st-century needs of most learners (VanKooten & Berkley, 2016; Kivunja, 2015; Smythe et al., 2014; Thornburg,

2012). To address the issue, K-12 educators are required to differentiate instruction for diverse learners to ensure student success (Bates, 2015; Short, 2012). Due to continued increase in distance learning (Simonson et al., 2015), blended classrooms (Caravias, 2015), and e-learning (Sharp, 2014) social networking platforms become key elements in instructional practices for delivery of information while motivating learners through high interactivity, connectivity, and communication (Simonson et al, 2015).

Students are proficient in using social media for multiple reasons (Blair et al., 2017; Simonson et al, 2015; Tabari, 2016) and prefer multimodal lessons to prepare them for globally competitive employment (Kivunja, 2014). Majority of young learners are very familiar with social media because of frequent use (Lenhart, 2009; Short, 2012) increasing their motivational levels (Keller, 2008; McArthur & Bostedo-Conway, 2012). On the other hand, teachers resist using social media due to lack of professional development (Fong, 2013; Shao, 2012; Smith & Dobson, 2011), familiarity and competence (Fong, 2013), difficulty of disconnecting from work or teacher workload, possible employment-status complications (O'Connor & Schmidt, 2015), and administration or policy support (Bertini, 2016). Additionally, cyberbullying negatively influences the effects of collaborative learning with the use of social media on students' learning (Sarwar, Zulfiqar, Aziz, & Ejaz Chandia, 2019). Safe social media use concerns were compounded by policy not keeping up with rapid developments in technology (Annansingh & Veli, 2016). With instruction, educators can help students learn proper digital citizenship enabling each to make good choices and have a positive digital footprint during as adults (Godfrey, 2016).

Instruction of digital literacy skills can be achieved through social networking, role playing, and information-rich environments with special considerations must be made to cultural and linguistic backgrounds (Hollister, 2016). Learners already engage in preferred way of gaining information through use of technology and social media for learning (Bates, 2015; Blair et al, 2017; Kivunja, 2015; McArthur, & Bostedo-Conway, 2012; Smith & Dobson, 2011; Vohra, 2016;). Roger's Diffusion of Innovation Theory explains the process of innovations' adoption at the individual or organizations (Alasfor, 2016; Hitlin & Olmstead, 2018; Rogers, 2003) addressing concern of a socioeconomic gap in learners' digital literacy abilities due to lack of equitable access to technology (Short, 2012) addressed by the Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS) (Achieve, 2013; Pimentel, 2013; Rogers, 2003; Short, 2012; USDOE 2010; USDOE, 2017b). The study sheds light on the experiences and perceptions of K-12 educators implementing social media platforms for learning.

The central research question at the core of the study was: What are K-12 educational professionals' perceptions and experiences during integrations of social media learning platforms for educational purposes: enhancing classroom instruction focused on improved academic achievement and digital literacy? Additionally, four subquestions guided the phenomenological research study:

1. How do K-12 educational professionals' experiences influence personal beliefs on the integration of social media learning platforms in the classroom?

2. What are K-12 educational professionals' experiences of professional development received directing the safe and effective application of social media learning platforms?

3. What are K-12 educational professionals' experiences in the use of social media learning platforms as a tool for digital literacy instruction?

4. What are K-12 educational professionals' experiences on the development of safe and appropriate educational use of social media learning platforms policies?

Nine themes emerged from the data: (1) improving learning experiences, (2) safe social-media use, (3) professional development advantage, (4) shift in focus, (5) educator role, (6) development of higher-order skills, (7) digital literacy development, (8) level of educator involvement, and (9) legal and ethical considerations. These themes surmise the overall understandings and interpretations of participants' experiences in the integration of social learning platforms or social media for education.

Analysis of the Findings

Subquestion 1. The participants were asked questions to describe experiences influencing personal beliefs on the integration of social media learning platforms in the classroom. Participants' responses served as a foundation for understanding how these K-12 educational professionals embraced educational use of social learning platforms to increase student academic achievement and digital literacy skills. Two final themes emerged based on participants' descriptions: improving learning experiences and safe social-media use.

Improving learning experiences. The participants shared beliefs about the integration of social media for educational use. All participants recognized the positive value of the social learning platforms for learning. Most of the participants self-identified as early adopters already implementing the tool within assigned classrooms. Participant D's beliefs were influenced by the gray area surrounding the use of social media shared

with her at conferences by her teacher union. However, in her role as an administrator,

she researched and encouraged educational use of social media learning platforms.

Participant D shared, "I noticed that Twitter is a great place to have students weigh in on

some of the educational experiences, or talk with them about certain things that they're

doing related to the classroom content." The statement agrees with findings from

Anggraeni (2017) case study on the benefits of Instagram® use for academic reasons.

Students showed positive attitudes towards the use of Instagram® as a helpful tool to

write better while feeling more motivated due to the social nature of the tool. Loomis

(2018) study utilized Twitter in her English Language Arts (ELA) classroom to increase

student engagement providing them with more individualized assistance.

Most participants were fond of the convenience social learning platforms

provided to teachers and students. Participant A thought of the benefits she experiences

personally as a learner: convenience, increased motivation, and time flexibility

generalizing them to apply to her students. She shared:

> …realizing that our students have lives outside of schools, and sometimes real life
>
> does throw curve balls even to those K-5 students. I realized that by them having
>
> that ability to access social media and to do their learning throughout that kind of
>
> digital platform, it gave them that flexibility, and it gave them more of a buy-in of
>
> their education.

Participant B experiences the same benefits of convenience when providing feedback to

her students. However, she believed young students did not take advantage of provided

teacher feedback, yet she was hopeful students would improve at later ages. The

outcomes agree with research in the use of social learning networks to improve learners'

engagement and participation levels providing ease of access, collaboration, and student voice with some concerns about features of how material shows on the learning platform not always agreeing with the learners' preferences (Heggart & Yoo, 2018).

Other ways most participants believed social learning networks improved learning experiences for students is by their abilities to showcase their learning through digital portfolios or presentations. Participant C shared, "They were keeping digital portfolios in the social media, and communicating with each other for help." On the other hand, Participant B believed "it's going to be a really, really good way for them to kind of showcase what they've learned" and "it could be a means of celebrating their achievements" while she had concerns about students' intentions with the educational tool. This finding agreed with other research on the benefits of using digital portfolios to improve quality of work to more complex products showcasing their learning (Stewart, 2017).

Participant A believed social media enabled her to differentiate her lessons and reduce physical, language, and time barriers. She was able to reach more students at their level. Her English Language Learners (ELLs) could communicate using social media to provide explanations of their reasoning leading to improved lesson plans based on a better evaluation of students' mastery levels. Participant A continued making her case as she discussed the communication benefits of using social media for some learners uncomfortable with sharing verbally:

> I think if we use it as a way for students to share ideas and also to ask questions in
> an environment where it's, I don't want to say safe, but it gives them a comfort

level because it's not directly face-to-face. I really feel that helps a lot of our

students with their academic achievement.

Literature review agrees the enabling of personal communication and expression through

uses of technological tools to benefit ELLs as specific learning benefits. (Fandiño, 2013;

Loomis, 2018).

Other ways most participants believed social learning networks improved learning

experiences for students is by their abilities to showcase their learning through digital

portfolios or presentations. Participant C shared, "They were keeping digital portfolios in

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technological tools benefits ELLs (Fandiño, 2013; Loomis, 2018).

Participant A shared her strong belief of learning smarter and not harder with her

students encouraging them to benefit from the body of knowledge already available. She

encouraged her students to benefit from each other's knowledge by saying:

We have this vast resource of knowledge out there, and we can reach out to so

many people to ask them questions and to learn from them, and for them to learn

from us. So, through social media, we can make changes in our own society, in

our own communities, and in ourselves.

The expressed sentiment aligns with research that individuals can benefit from each

other's knowledge made possible with the use of social media or social networks for

learning purposes (Klieger, 2016).

Safe social-media use. All participants expressed they cared about the safe use of

social media by young students and adults. As educators, they actively engaged in

teaching safety measures to students ensuring they used the tool solely for learning.

When discussing her experiences, beliefs, and actions, Participant C stated:

As the teacher, I definitely make sure that they're trained on how to write

appropriate comments to each other, which I think is a really good situation, [by]

having that safe environment where they're being trained on how to respond to

social situations or postings.

Participant C's beliefs aligned with Gleason and von Gillern (2018) findings from a

conceptual analysis on digital citizenship of secondary students. Digital citizenship, like

civic responsibility has been taught in educational institutions, should be included in

curriculum taught in schools.

As trainers of teachers, participants ensured other educators knew how to

implement social learning networks to benefit students knowing students test boundaries

and believing it was educators' duty to monitored students' social media use while

developing their digital footprints with proper safety measures and guidance (Gleason &

von Gillern, 2018; Kim & Choi, 2018; Leviner, 2018). Participant C increased safety

measures by including parents in her social learning networks. To express the steps taken

by her district to protect students while teaching them ownership of their actions with an

online presence, Participant A shared:

We have firewall set up to protect our students. Also, we have students sign a

digital contract, which is a way to hold those students accountable and understand

that when they use social media, they're still responsible for their own actions.

Participants' experiences and beliefs aligned with Kim and Choi (2018) study on the

development of digital citizenship for young learners providing a model to guide

educators in the efforts.

Participant B was concerned about the educator's effort needed to keep students

focused on the given academic task avoiding distractions. However, Participant B

implemented social media for learning regardless of her self-efficacy level. Similarly,

most participants viewed themselves as facilitators of knowledge when implementing

technological tools to increase engagement and learning. The findings align with a Nacu,

Martin, and Pinkard (2018) study establishing an online learning environment to develop

students' higher-order skills with the educator in a supporting role. Participant B

expressed her position on self-esteem affecting the educational implementation of social

media:

> Obviously, there are skills…that are constantly changing as far as using social
>
> media. You know, I expect my students to teach me too. So, as far as self-
>
> efficacy, I don't think that influences how I use it so much as maybe other
>
> teachers because I know other teachers feel like they need to know everything
>
> about it, and feel comfortable using a new tool of any kind before they kind of
>
> throw it out there for their students to use.

Participant D agreed with Participant B's perspective. Contrary to personal

beliefs, Participant D believed most educators felt intimidated by social media requiring

high self-efficacy to safely implement the tool in classrooms. Participant D explained the

importance of embracing technological tools for education. Yet, she felt intimidated by

the negative information she received at conferences by her union. Participant D was

aware of her lack of comfort and low self-efficacy with social media educational use, but

she did not discourage students from using technological tools. When discussing the topic

of adoption of social media, Participant C mentioned: "The thing that influences me the

most or my belief on the integration of social media is that young children are crying out

to do these same things." Participants A-C's experiences and beliefs did not align with

findings of Alhassan (2017) descriptive quantitative study and Bakar, Maat, and Rosli

(2018) systematic review of literature determining there was a positive relationship between self-efficacy of educators and integration of technology.

All participants expressed awareness cyberbullying could take place when implementing social media as a learning tool. The sentiments aligned with current research explaining the dark side of social media (Baccarella, Wagner, Kietzmann, & McCarthy, 2018). However, Participant C explained her perspective on possibilities of negative incidents involving social media use:

> And to me, I think that those are really important lessons, and it influences my integration because I don't see that as a problem. Oh, they're being bullied. So now I'm going to mix this for everybody? No! They would have been bullying anyway. I just wouldn't have seen it, right? This is just a way for this to be out in the open and for them to get help, and me to say, let's use this learning experience and change the way that we use [social] media.

Participant C's expressed beliefs aligned with research showing social media used as a tool to expose and reduce cyberbullying (Barlett, DeWitt, Maronna, & Johnson, 2018).

Summary of findings for Subquestion 1. All educators felt they should use social media to engage students with familiar tools to increase their engagement and academic levels. Participants explained learning experiences were improved due to the social interaction students experienced to benefit from each other. Most participants believed it improved access to learning for students who were timid to share face-to-face, those with language barriers agreeing with findings from Hamad (2017) and Loomis (2018), or with learning disabilities aligning with research from White and Forrester-Jones (2019).

Participants encouraged educational use of social learning networks as teachers or mentors of other teachers. They believed students always challenge rules or safety cautions, but this negative outcome could be reduced by teacher monitoring exposing offenders and reducing occurrences of cyberbullying. Findings were supported by research on the role of social media in cyberbullying (Barlett et al., 2018). Participants believed social media assisted educators in finding students prone to bullying in any kind of environment. Most of the participants taught students how to develop online citizenship and footprints setting them up for future success aligning with current research (Gleason & von Gillern, 2018; Kim & Choi, 2018; Leviner, 2018). Educators' increased self-efficacy corresponded to the adoption of an innovation like social media. Most participants believed their role was to facilitate learning integrating technological tools like social media regardless of their comfort or self-efficacy levels, not aligning with current research on self-efficacy and integration of technological tools (Bakar et al., 2018).

Subquestion 2. The participants were asked questions to describe experiences in receiving professional development (PD) influencing the safe and effective application of social media learning platforms. Participants' responses served as a foundation for understanding how K-12 educational professionals' received PD affected the integration of social media in classrooms (Sadaf & Johnson, 2017). Three themes emerged based on descriptions: professional development advantage, shift in focus, and educator role.

Professional development advantage. Findings showed some districts provided professional development for educators to safely implement technological tools for instruction aligning with the findings from Collier, Kingslely, Ovitt, Lin, and Benavidez

(2017) explaining the varying levels of professional development for educators before and after starting teaching careers. To support this statement, Participant C expressed her experiences as follows:

> In my experience, there is not a lot of professional development being directed from the district. So, my district is not preparing me or providing professional development for me for the use of social media. They might govern or say you can do this or you can't do that, but they're not really giving me professional development for the use of social media.

Participants were motivated to search and participate in online professional development utilizing social learning networks or conferences provided by vendors. Most of the participants showed personal initiative to remain well-informed aligning with Tour (2017) study where educators showed personal initiative to seek professional development with the use of social learning networks connecting with other educators. Participant B had a different experience. Her colleagues provided information to the e-learning coach on what professional development was needed. They had frequent professional development opportunities on a variety of social media available to educators and how it could be used in the classroom for academic and digital literacy skill instruction.

All participants' experiences with higher education system indicated a low to non-existent level of professional development or exposure to social media as a learning tool (Makkawi, 2017). Participants learned to appreciate types of social media based on doctoral coursework experiences. When discussing her higher education preparation, Participant D shared:

> The closest class I had to learn anything computer-related was a computer class, and I remember one of the most complicated things I learned was how to play Solitaire because when I took the class, I didn't know how to play that…on the computer.

Participants' experiences with higher education aligned with the Makkawi (2017) article indicating a lack of training during higher education of teachers regardless of the increase in teaching demands including the use of technology without any professional development or exposure. Makkawi (2017) explained the need for continued professional development to support the effective and correct use of information and communication technology.

Participant D felt uncomfortable with using social media for instruction after receiving information by her teacher union about negative incidents with teacher social media uses. All participants expressed professional development should focus on introducing teachers to available social media tools and how they can be implemented in classrooms. When talking about the focus of professional development, Participant A said:

> One of the biggest ones is an introduction to the different social media platforms that are available out there and how you know which ones would be most suitable for the age of the students because a lot of times, I think, sometimes, we want to rush the kids in and then other times, it's almost like teachers want to push the kids a little too fast with the media with the social media or they're too afraid to put social media in the hands of younger students. So, I think allowing teachers to

be able to see the different social media platforms available and how to use them correctly would influence the way that they're applying them in their classrooms. Participant A's beliefs aligned with Collier et al. (2017) explaining how professional development was provided to special education teachers to collaborate with parents through social media use. However, Manca and Ranieri (2017) found there were not enough professional development opportunities on the effective use of social media for education requiring future professional development at three levels (1) micro: student-educator relationships, (2) meso: policies and cultural and social norms, and (3) macro: cultural resistance to adoption of social media for learning.

Shift in focus. Participants felt there was a need to shift focus from the negative incidents to increasing the awareness of educational professionals on the vast variety of educational uses of social media providing a variety of modes of learning for students and educators. Participant A said:

We always hear what's going on that's negative with social media like Snapchat® and Twitter. I feel that if we allow some of the professional development to show how to incorporate those in a productive way, a lot of teachers would suddenly realize social media can be a useful tool in education and not a distractor, which a lot of teachers sometimes feel it is.

While some districts are ahead of others, Participant D's district is just starting conversations on educational use of social media aligning with Collier et al. (2017) findings on varying levels of teacher preparation on technological tools. On the other hand, Participant B's experience painted a different picture. The teachers' investment in

professional development was positively influencing the integration and implementation of social media in classrooms.

Participant C believed preconceived ideas of individuals about social media use were based on personal experiences. She felt the way to shift teacher perceptions about social media was to have teachers successfully integrating social media for classroom instruction share positive experiences with hesitant teachers providing them a first-hand view of the outcomes. Participant C expressed:

> There are people who just really don't like to use it, and they have that prerogative to have that opinion. I guess, to influence positive use of social media, what could be encouraged is for people who are using social media in the school to include [other teachers into their classes].

Participant C's beliefs aligned with the findings from Manca and Ranieri (2017) where educators used learning communities to share experiences with other educators using social media for learning.

Educator role. Most of the participants in the study served multiple professional roles within assigned school settings. They received professional development and teacher training within their schools or in conferences about social learning platforms. Participants C and D were always on the lookout for professional development. Their initiative played a big role in their preparations as well-informed educators aligning with the Tour (2017) study where the participants showed personal initiative to seek professional development with the use of social learning networks connecting with other educators.

Participants knew how they preferred delivery of professional development suitable to their learning styles indicating preferences to professional development with hands-on elements assisting the participants to create their attitudes towards the uses of the social media presented to them. Makkawi (2017) aligned with the participants' shared experiences in professional development tailored to learning styles and needs determining the value of the technological tools in classroom application. On this topic, Participant B shared:

> I'm one of those persons that learn by trying. Listening is fine, but I [need to] actually get in there and play with whatever the tool is. I am much more confident in my ability after I've used it, not just listening to some PD. But if the PD has a hands-on component, I feel much better about it.

Participants felt integration of social media for classroom instruction was related to the age of the educator. Participant A believed the older teachers experienced a difficult time changing practices while Participant B explained young teachers from her school seemed hesitant with the adoption of new technologies. Alhassan (2017) showed teacher's age was negatively related to the use of technological tools aligning with Participant A's experiences.

All participants had positive experiences with administrator support regarding the integration of social media. However, Participant A was approached by teachers in her district who felt pressured by administrators to stay away from social media integration. Participant C stated her administrators were neutral on social media integration regardless of being "…kind of behind the game on this…" (Participant C). Participant A's experiences of colleagues from her district aligned with one of the external barriers

experienced by educators in the integration of technological tools: lack of software or hardware, professional development, or administrative support (Makkawi, 2017).

Summary of findings for Subquestion 2. Findings made evident districts lack professional development to prepare educators on safe implementation of technological tools for instruction aligning with findings from Collier et al. (2017). All participants showed personal initiative searching for and participating in professional development learning about and utilizing social learning networks aligning with Tour (2017) findings. Participant B's experience with frequent professional development on a variety of social media for academic and digital literacy skill instruction aligned with findings of Manca and Ranieri (2017) study about teachers learning through social media about social media through learning communities. All participants' experiences with higher education system indicated lack of professional development or exposure to social media as a learning tool with most participants experiencing technological tools during their doctoral coursework aligning with Makkawi (2017) findings of lack of training during higher education of teachers regardless of the increase in teaching demands.

All participants believed professional development should focus on introducing teachers to available social media tools and ways of classroom implementation aligning with Collier et al. (2017) study. All participants focus should shift to increasing educational professionals' awareness of the vast variety of educational uses of social media. Findings indicated school districts were on different phases of teacher preparation on educational use of social media aligning with Collier et al. (2017) findings. Participant C believed preconceived ideas of individuals were based on personal experiences and the way to shift the focus from negative to positive perceptions of social media was for

teachers successfully integrating social media educationally to share experiences with hesitant teachers providing them a first-hand view of the positive outcomes. Participant C's beliefs aligned with the findings from Manca and Ranieri (2017) on learning communities.

Most participants were serving multiple roles within their school communities: learners and trainers. Participants showed initiative to obtain professional development on educational use of social networking platforms. They were satisfied with the training increasing their social media integration rates for learning. These sentiments align with Tour (2017) study. Participants expressed personal awareness of preferred methods of professional development delivery best-suited for them providing hands-on elements assisting the participants to evaluate the tools and make decisions on professional-use integration aligning with Makkawi (2017) findings. Participants expressed mixed perceptions on the effects of the educator's age and integration of social media with partial alignment to Alhassan (2017) findings on teacher's age negatively related to the use of technological tools. Participants' experiences with external factors like administrator influence were mixed. Makkawi (2017) findings align with the experiences of educators from Participant A's interview experiencing pressure to remain distant to the use of technological tools.

Subquestion 3. The participants were asked questions to describe their experiences in using social media learning platforms as a tool to develop learners' digital literacy skills. Participants' responses served as a foundation for understanding how K-12 educational professionals' experiences and perceptions with use of social media affected the development of learners' academic and digital literacy skills. Two final themes

emerged based on their descriptions: development of higher-order skills and digital
literacy development.

Development of higher-order skills. All participants shared a passion to pursue
professional development on new social media tools and to apply them within classrooms
to develop students' higher-order skills: communication, collaboration, critical thinking,
and creativity (Battelle for Kids, n.d.). Research review indicated teachers' beliefs and
perceptions pertaining to digital literacy development were related making them more
likely to implement technology like social media into their instructional practices with the
purpose of preparing students with digital literacy and 21st-century or higher-order skills
(Sadaf & Johnson, 2017).

Participant A modeled and encouraged her students to participate in collaborative
learning experiences like her webinars. As a result, some of her students created chat
rooms to study and collaborate on a topic of interest: World War II aligning with studies
using social media for collaboration and learning (Heggart & Yoo, 2018). Participant A
provided her students with a safe, open space where students could collaborate, ask for
help, express their thoughts or showcase learning when face-to-face was difficult or there
were language barriers. Findings agreed with current research findings from Hamad
(2017) and Loomis (2018).

Participant A applied her personal experiences of reducing barriers through use of
social media when communicating with her family to her classroom instruction
benefiting shy or curious students and those with English as their second language. Some
of her students extended learning beyond classroom boundaries. These findings aligned
with current research review where use of social learning platforms enhanced vocabulary

development for students learning English as a second language (AlSaleem, 2018; Hamad, 2017; Loomis, 2018). Participant B shared a similar experience where use of social media made education equitable and technology accessible to her student with special needs enabling the student to research images and apply them to communicate with visual aids aligning with findings from White and Forrester-Jones (2019) on the benefits of social media for communication, collaboration, and e-inclusion.

Students in Participant A's classroom collaborated with students from another school to collaborate around challenging math problems. Her students used critical thinking to solve math problems aligning with Hussin, Harun, and Shukor, (2019) and Klieger (2016) findings of learners using social media to learn from each other. Also, Participant A's students expressed their learning through multimedia presentations shared on social media to develop confidence in themselves. Participants A and C taught students the skill of asking questions to obtain help or the ability to assist peers in asking for help in appropriate ways. Participant C's students engaged in self-selected projects to express and develop their creativity as they collaborated using social media platforms to celebrate their school's 90th anniversary aligning with methods found beneficial in the development of creativity while benefiting academically through the use of digital portfolios and social learning media (Stewart, 2017).

Participant C students used the social media platforms used for learning while sharing their work with parents to gain positive feedback or acknowledgement from parents. Meanwhile, Participant C felt social media provided a record for parents to review and discuss learning experiences with their children at the end of the day. These reflective discussions allowed students to use metacognitive skills enabling students to

achieve deeper understanding aligning with the study by Jamari, Abdullah, Mohamed, Zaid, & Aris, 2018) on the development of problem-solving skills through metacognitive learning activities through the use of social media.

While most participants were invested and strongly believed in the benefits of social media integration, Participant D was hesitant due to the possibility of negative incidents occurring when social media platforms were involved. However, she encouraged students to use social media to research about topics they needed additional information, especially pertaining to APA© writing style in science papers or to provide opportunities for game-based learning to review or extend learning of topics already practiced in class with the teacher. Current research indicated models and benefits of e-learning through the use of game-based learning and social media aligning with the findings based on Participant D's experiences (Kaltman, 2019; Raileanu, 2019).

Digital literacy development. Pertaining development of students' digital literacy skills, Participants A-C shared many examples of developing students' abilities to develop their academic skills through research, communicate through emails, etc. The students chose showcasing their learning through social media. Their repeated, successful experiences with digital literacy development practices and helped increase their confidence in using chat rooms, emails, video production, and editing tools, writing code for computer applications, building computers, and research and properly cite sources. Participant C utilized social learning platforms for her students to research how-to tutorials and create their own tutorials to contribute to learning. She shared:

> They can find tutorials about things that they're interested in, and they can also
> feel like they're contributing to that knowledge by putting back into this situation.

I think this really increases academic achievement because I'm empowering them to be self-determined learners.

Participant A-C were immersed in digital literacy experiences and in turn immersed students in similar experiences with the focus of keeping students safe while they developed their digital literacy skills and digital footprint before becoming adults with access to more public and less monitored social media sites. They felt students must practice digital literacy similarly to other aspects of learning. These findings aligned with current research (Gleason & von Gillern, 2018; Godfrey, 2016; Kim & Choi, 2018; Leviner, 2018).

Participant D had more limited experiences with using social learning platforms for instruction since she was uncomfortable with using them. However, she explained encouraged use of hardware: mobile devices or computers. These experiences align with Mondal (2018) study. Personally, Participant D was very invested in learning and using social learning platforms for research or career advancements.

Findings on digital literacy development of students through the uses of a variety of technological tools and activities was supported by multiple studies where the focus was the development of digital literacy skills with the use of social media or social learning networks (Hobbs & Coiro, 2018; Kaltman, 2019; Raileanu, 2019; Sadaf & Johnson, 2017).

Summary of findings for Subquestion 3. All participant had varied experiences in their personal and professional uses of social media to develop students' higher order skills: communication, collaboration, critical thinking, and creativity. All participants pursued professional development to improve their own digital literacy skills before

implementing them in assigned classrooms. In each case, the educators' personal opinions on the safety and benefits of social media in instruction led to the varied types of lessons or activities and development of higher-order skills with academic achievement as the main focus. Students collaborated within the classroom or school and with students from other classrooms or schools using social media to communicate, problem-solve, or learn from each other. For some learners, social media use allowed them equitable access to learning reducing language, communication, or learning barriers. Current research supported the findings (AlSaleem, 2018; Battelle for Kids, n.d.; Hamad, 2017; Heggart & Yoo, 2018; Hussin et al., 2019; Jamari et al., 2018; Kaltman, 2019; Loomis, 2018; Raileanu, 2019; Sadaf & Johnson, 2017; Stewart, 2017; White & Forrester-Jones, 2019).

The development of digital literacy was made possible through the uses of higher-order skills and social media. The projects developed students' skills in coding, engineering, uses or building of technological devices, creation of videos, research, and other experiences. The participants varied in the ways they use technological tools or projects with their students. Most participants focused on software and hardware knowledge development to best-prepare students for all upcoming life experiences as adults. Current research supports the findings (Gleason & von Gillern, 2018; Godfrey, 2016; Hobbs & Coiro, 2018; Kaltman, 2019; Kim & Choi, 2018; Leviner, 2018; Mondal, 2018; Raileanu, 2019; Sadaf & Johnson, 2017).

Subquestion 4. The participants were asked questions to describe experiences on the development of policy on the safe and appropriate educational use of social media learning platforms. Participants' responses served as a foundation for understanding how K-12 educational professionals' experiences and perceptions with development and

implementation of policy affected the safe use of social media for learning. Two themes emerged based on participant descriptions: level of educator involvement and legal and ethical considerations.

Level of educator involvement. All of the participants were included in the process of development or implementation of safe social-media policy. Participant A was involved by providing input before the policy was developed and Participant B was involved after administration developed the policy requesting teacher input to revise it. Participant B was in the committee creating the policy choosing what appropriate social media should be adopted. Participant D was involved in communicating between district and teachers at her school site. The higher the participants' engagement in the process of social media use policy development, the more comfortable each felt in integrating social media as learning platforms in assigned classrooms and educating youth on ways to develop digital citizenship as a form of enforcing social media policy. Findings aligned with current research supporting the engagement of teachers in the development of social media use policy (Rodesiler, 2017; Thunman & Persson, 2018). Wagner (2017) suggests the engagement of students in the social media use policy in addition to other stakeholders.

Participant A felt teacher training should be provided once the policy is developed to ensure clear understanding of expectations. These sentiments align with Walster (2017) study emphasizing the need to make users aware of the acceptable use policy. Clarity and thoroughness of the policy were as important as making educators aware of social media use policy contents or providing training on ways to implement social learning networks in positive ways. Participant B shared an experience where the

superintendent reacted to a single negative incident with students misusing technology. As a result, he acted alone removing access to many technological tools. Teachers could request permission to access such tools providing justification for use with students. She expressed:

> Well, one of the things that came out of that situation was no phones in the classroom, in the locker room, at lunch, and before-and-after school. Facebook® and Twitter are disabled on their devices during school hours. Our superintendent just decided we're going to avoid as much as we can, and we're going to limit its use during school hours.

Wang (2016) indicated the public expressed more positive than negative comments towards the district and superintendent on Twitter than other forms of social media. However, the study recommended the use of social media to build positive relationships with the public while utilizing data mining to gain an understanding on the public's state.

All participants shared school administration was responsible for enforcement of social media use policy. However, most participants engaged in social media use policy implementation by teaching students what is appropriate online presence. Participant B actively engaged in teaching students positive and safe ways to use social media for the development of academic and digital skills and digital citizenship. Participants' actions were supported by current research on social media policy (Gleason & von Gillern, 2018; Godfrey, 2016; Kim & Choi, 2018; Leviner, 2018).

Participant C believed educators should be involved in the process of policy development especially when they feel strongly about what policy should include. Educators' active engagement would affect the ways they perceive, embrace, and

integrate social networking platforms. Participant C felt all users' perspectives about social media educational use should be respected and taken into consideration. "I guess whatever gets decided by the district, there should be lots of different people represented. And if you really have a strong opinion for or against, you really ought to be involved in those discussions" (Participant C). Participant D's experience was different from the other participants because her district policy was non-existent, unclear, or not well-known to her. Participant D explained lack of its existence made educators uncomfortable with embracing social learning platforms in classroom instruction. She shared:

> The policy that they have in relation to social media is just…not clear. I don't even think there's a clear policy related to actual social media use. I think it's more of a generalized policy, and the language has to be changed.

However, Participant D had positive experiences with her students during her limited use of social media platforms. Also, she felt social media was a very useful tool in assisting her school to overcome the problems of increased fighting among students by helping educators identify weak security areas and traffic flow issues. Similar to Participant D's experience, current research showed social media can be used as a tool to reduce cyberbullying (Barlett et al., 2018).

   Legal and ethical considerations. Each participant offered a unique perspective about the development of policies assisting educators to safely implement social learning platforms in classrooms. Participant A considered the need for the policy to provide guidelines on the appropriateness of the tool considering the age group of the learners. Participants A and D believed a good policy would be developed by considering all stakeholders' perspectives in its development. Specifically, Participant D believed

representative collaboration was needed in the development of policy. However, Participants A and B believed the development or revision of a policy should not be a "…knee jerk reaction…" to singular or rare negative incidents. Current research supported these perspectives (Rodesiler, 2017; Thunman & Persson, 2018; Wagner, 2017).

Participant A believed social media use for immediate assistance of students resulted in improved student-educator relationships. Similarly, Participant B cared for protecting students' safety above all providing guidelines for appropriate students-educator relationships. She explained:

> Our student [safety] always comes first, so I think that [the] policy has to describe what is a proper relationship: how do you know, how do you keep from giving a student the wrong idea, or how do keep a kind of a safe distance, [and] I don't mean geographical distance, but it's emotional distance between a student and an educator.

Participant A's experiences, perceptions, and beliefs aligned with Hamad (2017) findings of improved learning and student-educator relationships while improving students' academic skills with the use of social learning platforms to provide timely teacher feedback. Improved student-educator relationships were also found with the use of instant communication applications between the two parties during the course of the class (Hershkovitz, Abu Elhija, & Zedan, 2019).

Participant D cared about the clarity a policy should provide in defining terms and providing guidelines to educators on what is and is not appropriate explicitly defining student-educator relationships. Also, Participant D explained a clear and well-informed

policy would take into consideration freedom of speech and appropriate and respectful

online communication. Participant B believed a high priority consideration was to protect

the privacy of users especially young students giving them time to develop appropriate

digital literacy skills to have a successful adult life with an appropriate digital footprint.

These sentiments aligned with Rodesiler (2017) and Thunman and Persson (2018) studies

on protection of personally-identifiable information of educators and students and the

need for clearly-defined lines between professional and personal use and student-educator

relationships. Participant B and C believed a solution to providing safety and protection

to children when using technological tools was by adding parents to the social learning

platforms keeping the learning space as an open forum to protect students. Participant C

shared:

> I think that it's really important to have that parent-student-teacher kind of thing
>
> so everybody knows what's being said. I think that if people are afraid of
>
> [anything negative] happening, then there should be that connection to [their
>
> parents], so that…anything that I say to one of the children in my class, their
>
> parents get that information also. So, my conversation socially to their child is not
>
> private to them, it doesn't exclude them. Having an open forum like that helps
>
> eliminate any of that hidden conversations because that's where [inappropriate]
>
> things can happen.

Supporting Participant C's expressed belief, Participant A expressed the need for

educating parents, educators, and students on the policy guidelines clarifying what is and

is not a safe or appropriate use of social learning platforms aligning with Walster (2017)

study emphasizing the need to make users aware of the acceptable use policy. She shared:

Also, we need to ensure we're educating our parents as well. I think a lot of times,

parents will let their kids go online or put their kids on their phones not realizing

that they're actually putting [their children] in a pretty serious situation because

there are a lot of scary people out there on the Internet.

Summary of findings for Subquestion 4. All participants expressed the

importance of protecting the safety of students focusing on teaching students how to

safely express themselves for communication or learning while developing digital

citizenship and educating students about safe and respectful social learning environments.

Participants varied in the level of involvement in enforcing or understanding of social

media use policies (Rodesiler, 2017; Thunman & Persson, 2018; Walster, 2017). Often,

local administration was the main enforcer at local school sites. In some cases,

participants were unclear of existing policies and participants' levels of involvement in

the development of their schools' policies ranged from minimal to first-hand engagement.

Participants involved in policy development experienced higher positivity towards the

policy, its enforcement, or the use of social media in classroom instruction. Current

research supported the findings from participants' experiences, perceptions, and beliefs

(Barlett et al., 2018; Gleason & von Gillern, 2018; Godfrey, 2016; Hershkovitz et al.,

2019; Kim & Choi, 2018; Leviner, 2018; Rodesiler, 2017; Thunman & Persson, 2018;

Wagner, 2017; Walster, 2017; Wang, 2016).

Limitations and Relevance of the Study

The study undertaken is relevant to all schools considering social newtwork

platforms as a potential means to support or expand instructional efficacy. The proposed

study explored the experiences of educational professionals with experience in the use of

social media learning platforms for classroom instruction in the public K-12 educational setting. The findings of the study will apply to the particular setting but may make a contribution to unfolding research and thereby, influnce other settings as well. The study engaged a small, yet appropriate sample size for the qualitative, phenomenological study. Although the sample size is appropriate for the proposed study, the sample only represents a small part of the whole population and an audience is forewarned of the limitation before wholesale applying discovery to parallel or alternative settings. The qualitative nature of the research design resulted in findings unique to each participant's lived experiences on the phenomenon of integrating social learning networks for improvement of academic and digital literacy skills. The participants were members of AECT, therefore not representing the entire population, and combining this with the small sample size and qualitative research design limits the generalizability and interpretation of the findings.

Conclusions and Recommendations

The study was based on Roger's Diffusion of Innovation Theoretical Framework (Alasfor, 2016; Hitlin & Olmstead, 2018; Rogers, 2003). Although not updated since 2003, the framework is applicable to innovations in all fields: business, education, technology, and others. Findings of the study are better understood through the conceptual framework as its lens.

Connecting findings to conceptual framework. The adoption rate of social media as an innovation for these participants aligns well Roger's Diffusion of Innovation Theory (Alasfor, 2016; Hitlin & Olmstead, 2018; Rogers, 2003). The early adopters experienced higher comfort levels with social learning platforms. Most of the participants

were early adopters with one participant in the late majority category of adopters. The characteristics of innovations influencing rates of adoption were relative advantages, compatibility, complexity, trialability, and observability (Penjor & Zander, 2016; Rogers, 2003; Sahin & Thompson, 2006).

Relative advantage of an innovation is when potential adopters perceive the innovation to be better than its predecessor in terms of convenience, satisfaction, economical, or social status (Rogers, 2003). Participants in the study considered the factors: convenience, satisfaction, economical, or social status when considering the relative advantages of adopting social media as a learning tool. Participants shared experiences and perspectives on convenience, level of satisfaction based on outcomes of students' learning and convenience, and free or low cost of use like Google® applications.

Compatibility of an innovation is how much adopters perceive the innovation will fit with preexisting values, past experiences, or needs (Rogers, 2003). Most participants had experiences with social learning networks during post-graduate coursework. Participant D had no past experiences with any technological tools' uses during her higher education except for learning Solitaire. All participants felt the need to connect with students and improve quality of lessons to meet the needs of learners with disabilities, language barriers, or other characteristics aligning with current research on these subgroups of students (AlSaleem, 2018; Loomis, 2018; White & Forrester-Jones, 2019). However, they differed in their adoption and application of social media for instruction. Perhaps this could be attributed to participants' preexisting values or the compatibility of social learning platforms with their social system: school or district.

Complexity of an innovation is the level of difficulty the potential adopters perceive the innovation to understand or use (Rogers, 2003). Most participants adopting and integrating social learning platforms more found them to be less complex due to their higher education experiences and current professional development specifically addressing the uses of social media in education.

Trialability is an innovation's potential for adopters to experiment with it on a limited basis (Rogers, 2003). All participants experienced multiple social media during their doctoral education and continued professional development provided by the school, district, or pursued by individual interests. All participants expressed they found hands-on experiences as a major factor in the adoption of social media for specific age groups or learning experiences.

Observability is how visible are the results of an innovation to potential adopters (Rogers, 2003). Most participants expressed their successes with students' improved academic or digital literacy skills and digital citizenship. Participants A-C felt these experiences were observable by parents while allowing the learning to extend at home with reflective, metacognitive conversations with parents at dinner time. Most participants mentioned ameliorated learning conditions and skill levels for students with disabilities or language barriers agreeing with current research (AlSaleem, 2018; Loomis, 2018; White & Forrester-Jones, 2019). Most participants observed an increased engagement with learning and students' willingness to initiate extended experiences across classrooms and schools to enrich knowledge on topics of interest.

Organizational innovation happens in two phases: initiation and implementation (Rogers, 2003). While schools have provided professional development and supported

the educational use of some social learning networks, the continued support of educational professionals with continued professional development and available technology devices was found to be sporadic according to some of the participants.

Recommendations for future research. The mentioned limitations helped the researcher to identify possible recommendations for future research pertaining to methodology and demographics.

Methodologies. The use of phenomenological research design provided an in-depth exploration of participants' unique experiences with no generalizability based on future research recommendations by Alasfor (2016) cross-sectional study for interviews to obtain perspectives of educators based on their experiences with the phenomenon. Future research using other research designs or methodologies may shed more light on safe ways to integrate social medial learning networks and how to help educators overcome resistance of social learning networks with the younger ages. Most research focused on adult learner populations. The researcher recommends future research is needed to help the integration of social media for educational use in the K-12 educational setting since its findings are limited in generalizability due to the qualitative nature of the research design and interpretative nature of its data analysis methodologies.

Demographics. Alasfor (2016) cross-sectional study focused on higher education students, leaving out K-12 students. The study focused on K-12 student with most of the participants teaching elementary age students. Additional studies can expand the focus by recruiting a wider range of participants including all K-12 grade levels. This study focused on public education school educators limiting the findings to that specific

context. Future research can obtain an understanding of the experiences of educators in private K-12 school settings.

Although every effort was made to recruit participants of all age groups and genders, the participants of the study were only female, age group 40-60. Conflicting perspectives came from the participants regarding the effect of age on the adoption of an innovation like social media learning platforms for educational use. Previous research found age and gender of instructors not to be significant predictors in their decision to adopt social media for educational use (Alasfor, 2016).

The researcher used member benefits to recruit participants through Association for Educational Communications and Technology (AECT). Researcher found limited numbers of members who were K-12 educational practitioners. Of them, the researcher found fewer were involved in social media learning platforms' educational use, and of them, fewer were willing to participate in the study leading to recommendations for other methods of recruitment for participants.

Further action. Although educators understand the need to embrace teaching practices preparing students to become globally competitive equipped with proper academic skills, digital literacy, and digital citizenship, districts resist embracing the new generation of technology-heavy learners by creating policies created for not-future oriented educational systems (Annansingh & Veli, 2016; Gleason & von Gillern, 2018; Godfrey, 2016; Karpman & Drisco, 2016; Manca & Ranieri, 2017; Rodesiler, 2017; Sarwar et al., 2019; Thunman & Persson, 2018; Walster, 2017). The researcher sought only to bring to light certain anxieties, increased sensitivities to the technologies unfolding around us and how schools in the future will simply not be able to exclude

technology from daily student experience so need, instead, to embrace and manage them. Below are some recommendations for educators and policy makers to consider when developing or revising social media use policies:

- Maintain updated social media use policies to protect students and educators

- Align policy to federal and state laws protecting identities of users

- Engage all stakeholders: educators, students, parents, and administrators

- Educate all users on the contents of the policy

- Explain how the policy can be safely implemented providing positive examples of uses

- Create curriculum with standards on digital citizenship development

- Encourage fair and equitable access to technology and technological tools for all students reducing any digital literacy gaps based on gender, race, or socioeconomic status of learners

- Provide clear definitions of terms, roles, and relationships between the users

- Provide clearly defined lines between personal and professional uses of social media

- Provide clear guidelines about on and off campus use

- Provide trainings: webinars, in-person, or otherwise to users pertaining the safe educational use of social media

- Adopt digital mining software to easily identify perpetrators in a timely manner protecting other users from any harm

- Provide opportunities for educators to create online learning communities to learn appropriate uses of social media for instruction

- Provide technology hardware and software to educators to support technology-based instructional practices

- Provide administrative positive support to educators with assistance or recognition of positive academic use of social media

- Provide clear explanations of consequences for students, educators, and other users

- Establish interventions for students needing additional guidance with respect to digital citizenship and online presence

- Provide acceptable parameters or constraints for communication between educators and students: tool used and time of communication.

- Be proactive rather than reactive to negative incidents through social media

- Provide clear guidelines about required response by educators to students, parents, or other colleagues while considering bargaining agreements, legal rights, and personal considerations

- Establish open lines of communications with communities to understand and better serve their needs

- Establish committees to evaluate and adopt potential new technologies

The findings combined with research shed light on the educational uses of social learning networks or social media to engage students in learning resulting in increased academic and digital literacy skills. Due to the limitations of the study, findings are not generalizable. The recommendations are simply consideration points and cannot be generalized. The researcher cautions against policies or practices limiting or prohibiting

use of technological tools not providing the necessary learning opportunities for young

learners need to be academically and digitally literate.

References

21st Century Schools. (2017a). *Framework for 21st Century schools*. Retrieved from

    http://www.21stcenturyschools.com/intro-to-21st-century-education.html

21st Century Schools. (2017b). *Social-emotional environment*. Retrieved from

    http://www.21stcenturyschools.com/emotional.html

Abdelmalak, M. M. M. (2015). Web 2.0 technologies and building online learning

    communities: Students' perspectives. *Online Learning, 19*(2), 1-20.

Achieve. (2013). *Next generation science standards: For states by states.* Washington

    DC: National Academies Press.

Achieve. (2014). *Rising to the challenge: Are high school graduates prepared for college

    and work?* Retrieved from https://www.achieve.org/rising-challenge-survey-1

Achieve. (2016). *How states are making career readiness count: A 2016 update*.

    Retrieved from https://www.achieve.org/publications/how-states-are-making

    -career-readiness-count-2016-update

Agosto, D. E., & Abbas, J. (2016). Simple tips for helping students become safer, smarter

    social media users. *Knowledge Quest, 44*(4), 42-47.

Ahn, J., Bivona, L. K., & DiScala, J. (2012). Social media access in K-12 schools:

    Intractable policy controversies in an evolving world. *ASIST 48*(1), 1-10. doi:10

    .1002/meet.2011.14504801044

Aifan, H. A. (2015). *Saudi students' attitudes toward using social media to support

    learning* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses

    Global. (3713504)

Alasfor, K. (2016). *Social media adoption among university instructors in Saudi Arabia* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (10195953)

Alhassan, R. (2017). Exploring the relationship between Web 2.0 tools self-efficacy and teachers' use of these tools in their teaching. *Journal of Education and Learning, 6*(4), 217-228.

Al-Rahmi, W. M., Othman, M. S., & Yusuf, L. M. (2015). The role of social media for collaborative learning to improve academic performance of students and researchers in Malaysian higher education. *International Review of Research in Open and Distributed Learning, 16*(4), 177-204.

AlSaleem, B. I. (2018). The effect of Facebook activities on enhancing oral communication skills for EFL learners. *International Education Studies, 11*(5), 144-153. doi:10.5539/ies.v11n5p144

American Management Association [AMA]. (2012). *AMA 2012: Critical skills survey*. Retrieved from http://playbook.amanet.org/wp-content/uploads/2013/03/2012 -Critical-Skills-Survey-pdf.pdf

Anggraeni, C. W. (2017). Students' perspectives toward the use of Instagram in writing class. *English Language and Literature International Conference (ELLiC) Proceedings, 1*, 68-74. Retrieved from https://jurnal.unimus.ac.id/index .php/ELLIC/article/view/2412/2467

Annansingh, F., & Veli, T. (2016). An investigation into risks awareness and e-safety needs of children on the internet: A study of Devon, UK. *Interactive Technology and Smart Education, 13*(2), 147-165. doi:10.1108/ITSE-09-2015-0029

Arnsten, A. F. T. (2009). Stress signalling pathways that impair prefrontal cortex structure and function. *Nature Reviews: Neuroscience, 10*(6), 410-422. doi:10.1038/nrn2648Focuson:Stress

Baccarella, C. V., Wagner, T. F., Kietzmann, J. H., & McCarthy, I. P. (2018). Social media? it's serious! Understanding the dark side of social media. *European Management Journal, 36*(4), 431-438.

Bakar, N. S. A., Maat, S. M., & Rosli, R. (2018). A systematic review of teachers' self-efficacy and technology integration. *International Journal of Academic Research in Business & Social Sciences, 8*(8), 540-557. doi:10.6007/IJARBSS/v8-i8/4611

Barlett, C. P., DeWitt, C. C., Maronna, B., & Johnson, K. (2018). Social media use as a tool to facilitate or reduce cyberbullying perpetration: A review focusing on anonymous and nonanonymous social media platforms. *Violence and Gender, 5*(3), 147-152. doi:10.1089/vio.2017.0057

Bar-On, R., Tranel, D., Denburg, N. L., & Bechara, A. (2003). Exploring the neurological substrate of emotional and social intelligence. *Brain, 126*(8), 1790-1800. doi:10 .1093/brain/awg177

Barrett, L. F. (2009). Variety is the spice of life: A psychological construction approach to understanding variability in emotion. *Cognition and Emotion, 23*(7), 1284-1306. doi:10.1080/02699930902985894

Bates, A. W. (2015). *Teaching in a digital age: Guidelines for designing teaching and learning.* Vancouver, BC: Tony Bates Associates. Retrieved from https: //opentextbc.ca/teachinginadigitalage/

Battalio, J. (2009). Interaciton online Orellana, A. (2009). Class size and interaction in online courses. In A. Orellana, T. L. Hudgins, & M. Simonson (Eds.), *The perfect online course: Best practices for designing and teaching.* (pp. 127-156). Charlotte, NC: Information Age.

Battelle for Kids. (n.d.). *Partnership for 21st Century learning: Framework & resources*. Retrieved from http://www.battelleforkids.org/networks/p21/frameworks -resources

Belch, H. E. (2012). Teachers beware! The dark side of social networking. *Learning & Leading with Technology, 39*(4), 15-19.

Bentz, D. T. (2009). *Online and face-to-face classes: A comparative analysis of teaching presence and instructor satisfaction* (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3386573)

Bertini, M. M. (2016). *The impact of technology acceptance and openness to innovation on software implementation* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (10159891)

Blair, R., Millard, D., & Woollard, J. (2017). Perceptions of school children of using social media for learning. *International Journal on E-Learning, 16*(2), 105-127.

Borde, J. D. (2014). *Understanding people's adoption of individual-use renewable energy technology* (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (1557393)

Bowden, W. R. (2015). Collaboration, pedagogy, and media: Short-term summer programs emphasize project based and social emotional learning. *Journal of Media Literacy Education, 7*(1), 72-76.

Caravias, V. (2015). Literature review in conceptions and approaches to teaching using blended learning. *International Journal of Innovation in the Digital Economy, 6*(3), 46-73. doi:10.4018/ijide.2015070104

Carbonell, X., & Panova, T. (2017). A critical consideration of social networking sites' addiction potential. *Addiction Research & Theory, 25*(1), 48-57. doi:10.1080 /16066359.2016.1197915

Charles, R. L. (2015). *Motivational principles based on attention, relevance, confidence, and satisfaction to increase student engagement and enhance achievement: A case study* (Unpublished doctoral dissertation). Nova Southeastern University, Fort Lauderdale, Florida.

Chatham, C. D. (2015). *Limiting student computer device distractions in a 1-to-1 classroom environment* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3702590)

Chun, M. M., Golomb, J. D., & Turk-Browne, N. (2011). A taxonomy of external and internal attention. *Annual Review of Psychology, 62*, 73-101. doi:10.1146 /annurev.psych.093008.100427

Clark, R. E. (2012). Media are "mere vehicles": The opening argument, In R. E. Clark (Ed.), *Learning from media: Arguments, analysis, and evidence* (2nd ed., pp. 1-12). Greenwich, CT: Information Age.

Collier, M., Kingsley, K. V., Ovitt, B., Lin, Y., & Benavidez, J. R. (2017). Fostering collaboration with families of children with disabilities: Online professional development for K-12 teachers. *The Teacher Educator, 52*(2), 138-154. doi :10.1080/08878730.2016.1273421

Cortez-Riggio, K. (2014). *Digital media engagement and the Moral/Ethical thinking of fifth grade bloggers* (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3616850)

Creative Commons. (2016, November 28). *The diffusion of innovation*. Retrieved from https://commons.wikimedia.org/wiki/File:Diffusion_of_ideas.svg

Creswell, J. W. (2018). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). Thousand Oaks, CA: Sage.

Crompton, H., Rippard, K., & Sommerfeldt, J. (2016). To post, or not to post, that is the question: Teachers candidates' social networking decisions and professional development needs. *Journal of Technology and Teacher Education, 24*(3), 257-279.

Dabbagh, N., & Kitsantas, A. (2012). Personal learning environment, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and Higher Education, 15*(1), 3-8.

Davis, R. S., & West, R. E. (2014). Technology integration. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop. *Handbook of research on educational communications and technology* (4th ed., pp. 841-853). New York, NY: Springer.

Deco, G., & Rolls, E. T. (2003). Attention and working memory: A dynamical model of neuronal activity in the prefrontal cortex. *The European Journal of Neuroscience, 18*(8), 2374-2390.

Definition and Terminology Committee of the Association for Educational Communications and Technology [DTCAECT]. (2008). Definition. In A.

Januszewski & M. Molenda (Eds.), *Educational technology: A definition with commentary* (pp. 1-14). New York, NY: Routledge.

Department of eLearning. (2015). *21st Century competences for our age: The building blocks of digital literacy from enhancement to transformation.* Retrieved from https://dge.mec.pt/sites/default/files/ERTE/Estudos_Tecnologias/elc_digital _literacy.pdf

Devine, D. A. (2015). *Assessment of nurse faculty's acceptance and intent to use social media using the unified theory of acceptance and use of technology 2 model* (Doctoral Dissertation). Available from ProQuest Dissertations & Theses Global. (3702262)

Dick, W., Carey, L., & Carey, J. O. (2015). *The systematic design of instruction.* (8th ed.). Upper Saddle River, NJ: Pearson.

Edmonds, W. A., & Kennedy, T. D. (2013). *An applied reference guide to research designs: Quantitative, qualitative, and mixed methods.* Thousand Oaks, CA: SAGE Publications.

Emmel, N. (2013). Sampling and choosing cases in qualitative research: A realist approach. Thousand Oaks, CA: SAGE Publications Inc.

Fandiño, Y. J. (2013). 21st century skills and the English foreign language classroom: A call for more awareness in Colombia. *GIST Education and Learning Research Journal, 7*(November), 190-208.

Finamore, D. C. D., Hochanadel, A. J., Hochanadel, C. E., Millam, L. A., & Reinhardt, M. M. (2012). Electronic media: A motivational strategy for student success. *Online Journal of Distance Learning Administration, 15*(1), 1-8.

Fong, D. (2013). *A study of high school veteran teachers who have changed instructional paradigms to embrace digital tools: Framed within adult learning theory* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3562287)

Ford, D. P., & Mason, R. M. (2013). A multilevel perspective of tensions between knowledge management and social media. *Journal of Organizational Computing and Electronic Commerce, 23*(1-2), 7-33. doi:10.1080/10919392.2013.748604

Fox, J., & Moreland, J. J. (2015). The dark side of social networking sites: An exploration of the relational and psychological stressors associated with Facebook use and affordances. *Computers in Human Behavior, 45*, 168-176. doi:10.1016/j.chb.2014.11.083

Gillens, P. L. (2015). *Social media networking tools in public school education: The policy behind the practice* (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3734349)

Gleason, B., & von Gillern, S. (2018). Digital citizenship with social media: Participatory practices of teaching and learning in secondary education. *Educational Technology & Society, 21*(1), 200–212.

Godfrey, R. V. (2016). Digital citizenship: Paving the way for family and consumer sciences. *Journal of Family and Consumer Sciences, 108*(2), 18-22. doi:10.14307/JFCS108.2.18

Graham, C. R., & Dziuban, C. (2008). Blended learning environments. In J. M. Spector, M. D. Merrill, J. van Merrienboer, & M. P. Driscoll (Eds.), *Handbook of research*

on educational communications and technology (3rd ed., pp. 269-276). New

York, NY: Taylor and Francis.

Hamad, M. M. (2017). Using WhatsApp to enhance students' learning of English

language: Experience to share. *Higher Education Studies, 7*(4), 74-87. doi:10

10.5539/hes.v7n4p74

Heggart, K. R., & Yoo, J. (2018). Getting the most from Google classroom: A

pedagogical framework for tertiary educators. *Australian Journal of Teacher

Education, 43*(3), 140-153.

Hershkovitz, A., Abu Elhija, M., & Zedan, D. (2019). WhatsApp is the message: Out-of-

class communication, student-teacher relationship, and classroom environment.

Journal of Information Technology Education: Research, 18, 73-95.

Hitlin, P., & Olmstead, K. (2018, March 21). The science people see on social media.

Pew Research Center. Retrieved from http://www.pewinternet.org/2018/03/21/

facebook-and-science-acknowledgments/

Hobbs, R., & Coiro, J. (2018). Design features of a professional development program in

digital literacy. *Journal of Adolescent & Adult Literacy, 62*(4), 401-409.

Hollister, J. M. (2016). *In- and out- of character: The digital literacy practices and

emergent information worlds of active role-players in a new massively

multiplayer online role-playing game* (Doctoral dissertation). Retrieved from

ProQuest Information & Learning. (10120632)

Hung, Jonassen, & Liu (2008). Problem-based learning. In J. M. Spector, M. D. Merrill,

J. van Merrienboer, & M. P. Driscoll (Eds.), *Handbook of research on*

educational communications and technology (3rd ed., pp. 485-506). New York, NY: Taylor and Francis.

Hussin, W. N. T. W., Harun, J., & Shukor, N. A. (2019). Online interaction in social learning environment towards critical thinking skill: A framework. *Journal of Technology and Science Education, 9*(1), 4-12.

Iacoboni, M. (2009). Imitation, empathy, and mirror neurons. *Annual Review of Psychology, 60*, 653-670. doi:10.1146/annurev.psych.60.110707.163604

Iacoboni, M., & Dapretto, M. (2006). The mirror neuron system and the consequences of its dysfunction. *Nature Reviews. Neuroscience, 7*(12), 942-51. doi:10.1038 /nrn2024

Imlawi, J., Gregg, D., & Karimi, J. (2015). Student engagement in course-based social networks: The impact of instructor credibility and use of communication. *Computers and Education*, *88*, 84-96.

Immordino-Yang, M. (2011). Me, my "self" and you: Neuropsychological relations between social emotion, self-awareness, and morality. *Emotion Review, 3*(3), 313-315. doi:10.1177/1754073911402391

Immordino-Yang, M., & Singh, V. (2013). Hippocampal contributions to the processing of social emotions. *Human Brain Mapping, 34*(4), 945-955. doi:10.1002/hbm .21485

Immordino-Yang, M., & Sylvan, L. (2010). Admiration for virtue: Neuroscientific perspectives on a motivating emotion. *Contemporary Educational Psychology, 35*(2), 110-115. doi:10.1016/j.cedpsych.2010.03.003

Instructure, Inc. (2016, January 17). Classroom ban on personal tech due to fears of

distraction. *PR Newswire*. Retrieved from http://www.prnewswire.com/news

-releases/classroom-ban-on-personal-tech-due-to-fears-of-distraction-565594411

.html

International Society for Technology in Education [ISTE]. (2017). *ISTE standards for

students.* Retrieved from http://www.iste.org/standards/standards/for-students

Irwin, C., Ball, L., Desbrow, B., & Leveritt, M. (2012). Students' perceptions of using

Facebook as an interactive learning resource at university. *Australasian Journal

of Educational Technology*, *28*(7), 1221-1232.

Jacobsen, M. H. S. (2010) Paying attention or fatally distracted? Concentration, memory,

and multi-tasking in a multi-media world. *Journal of the Legal Writing Institute,

16*, 419-462. Retrieved from http://www.law2.byu.edu/Law_Library/jlwi

/archives/2010/419.pdf

Jamari, D., Abdullah, Z., Mohamed, H., Zaid, N. M., & Aris, B. (2018). Implementation

of case based learning and metacognitive scaffolding in social media to improve

problem solving Skill—A theoretical framework. *Advanced Science Letters,

24*(6), 4196-4201. doi:10.1166/asl.2018.11570

Johnson, D. W., & Johnson, R. T. (2008). Cooperation and the use of technology. In J.

M. Spector, M. D. Merrill, J. van Merrienboer, & M. P. Driscoll (Eds.), *Handbook

of research on educational communications and technology* (3rd ed., pp. 401-

424). New York, NY: Taylor and Francis.

Kaltman, I. (2019). Digital game-based learning enhances literacy. *The Education Digest,

84*, 43-47.

Karpman, H. E., & Drisco, J. (2016). Social media policy in social work education: A review and recommendations. Journal of Social Work Education, 52(4). 398-408. doi:10.1080/10437797.2016.1202164

Keller, J. M. (1987a). Development and use of the ARCS model of motivational design. *Journal of Instructional Development, 10*(3), 2-10.

Keller, J. M. (1987b). Strategies for stimulating the motivation to learn. *Performance & Instruction, 26*(8), 1-7. doi:10.1002/pfi.4160260802

Keller, J. M. (2008). First principles of motivation to learn and e^3-learning. *Distance Education, 29*, 175–185. doi:10.1080/01587910802154970

Kelly, F. S., McCain, T., & Jukes, I. (2009). *Teaching the digital generation.* Thousand Oaks, CA: Corwin Press.

Kim, C., Lee, J., Merrill, M. D., Spector, M., & van Merriënboer, J. J. G. (2008). Foundations for the future. In J. M. Spector, M. D. Merrill, J. van Merriënboer, & M. P. Driscoll (Eds.), *Handbook of research on educational communications and technology.* (3rd ed., p. 807-815). New York, NY: Taylor and Francis.

Kim, M., & Choi, D. (2018). Development of youth digital citizenship scale and implication for educational setting. *Educational Technology & Society, 21*(1), 155–171.

Kivunja, C. (2014). Do you want your students to be job-ready with 21st century skills? Change pedagogies: A pedagogical paradigm shift from Vygotskyian Social Constructivism to critical thinking, problem solving and Siemens' Digital Connectivism. *International Journal of Higher Education, 3*(3), 81-91.

Kivunja, C. (2015). Unpacking the information, media, and technology skills domain of the new learning paradigm. *International Journal of Higher Education, 4*(1), 166-181.

Klieger, A. (2016). The use of social networks to employ the wisdom of crowds for teaching. *TechTrends, 60*(2), 124-128. doi:10.1007/s11528-016-0020-0

Ko, S., & Rossen, S. (2010). *Teaching online: A practical guide* (3rd ed.). New York, NY: Routledge.

Kozma, R. B. (2012). Robert Kozma's counterpoint theory of "learning with media," In R. E. Clark (Ed.), *Learning from media: Arguments, analysis, and evidence* (2nd ed., pp. 103-146). Greenwich, CT: Information Age.

Laughton, P. (2011). The use of wikis as alternatives to learning content management systems. *The Electronic Library*, *29*(2), 225-235.

Lenhart, A. (2009). *Teens and social media: An overview*. Retrieved from http://www .pewinternet.org/2009/04/10/teens-and-social-media-an-overview/

Lesgold, A. M., & Welch-Ross, M. (2012). *Improving adult literacy instruction: Options for practice and research.* Washington, DC: National Academies Press.

Leviner, M. (2018). Cyberbullying and social media responsibility in schools (Doctoral Dissertation). Available from ProQuest Dissertations & Theses Global. (10975442)

Lichter, J. (2012). Using YouTube as a platform for teaching and learning solubility rules. *Journal of Chemical Education*, *89*(9), 1133-1137.

Lieb, D. A. (2011). Mo. Repeals teacher-student 'Facebook' ban. *Associated Press*. Retrieved from http://www.nbcnews.com/id/44994464/ns/technology_and

_science-tech_and_gadgets/t/mo-repeals-teacher-student-facebook-ban/#
.WYTvvYjyu00

Loomis, S. (2018). #Twitter: A pedagogical tool in the high school classroom. *Journal of Language and Literacy Education, 14*(1), 1-10.

Lowyck, J. (2014). Bridging learning theories and technology-enhanced environments: A critical appraisal of its history. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop. *Handbook of research on educational communications and technology* (4th ed., pp. 3-20). New York, NY: Springer.

Makkawi, F. (2017). Integrating technology in teachers' profession. *International Journal for Infonomics, 10*(2), 1325-1332.

Manca, S., & Ranieri, M. (2017). Implications of social network sites for teaching and learning: Where we are and where we want to go. *Education and Information Technologies, 22*(2), 605-622. doi:10.1007/s10639-015-9429-x

Mansfield, M. (2017). *The impact of the digital divide on first-year community college students* (Doctoral Dissertation). Available from ProQuest Dissertations & Theses Global. (576360)

Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research* (6th ed.) Thousand Oaks, CA: SAGE.

McArthur, J. A., & Bostedo-Conway, K. (2012). Exploring the relationship between student-instructor interaction on Twitter and student perceptions of teacher behaviors. *International Journal of Teaching and Learning in Higher Education, 24*(3), 286-292.

Miller, C., & Mazur, M. (2009). Toward a person-centered model of instruction. In A. Orellana, T. L. Hudgins, & M. Simonson (Eds.), *The perfect online course: Best practices for designing and teaching.* (pp. 275-298). Charlotte, NC: Information Age.

Miller, E. K., & Buschman, T. J. (2013). Cortical circuits for the control of attention. *Current Opinion in Neurobiology, 23*(2), 216-222. doi:10.1016/j.conb.2012 .11.011

Mondal, S. (2018). *Attitudes of pre-service teachers towards the use of mobile devices in teaching-learning process in India*. In M. Heijnen, E. Berge, & C. van Hattem, Paper presented at the ATEE Winter Conference 2018 (pp. 6-12). Utrecht, the Netherlands: Technology and Innovative Learning.

Morgan, K. (2014). Technology integration in multicultural setting. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop. *Handbook of research on educational communications and technology* (4th ed., pp. 867-871). New York, NY: Springer.

Nacu, D., Martin, C. K., & Pinkard, N. (2018). Designing for 21st century learning online: A heuristic method to enable educator learning support roles. *Educational Technology, Research and Development, 66*(4), 1029-1049. doi:10.1007/s11423 -018-9603-0

Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of Adolescence, 55*, 51-60. doi:10.1016/j .adolescence.2016.12.00

Oberwelland, E., Schilbach, L., Barisic, I., Krall, S. C., Vogeley, K., Fink, G. R., . . . Schulte-Rüther, M. (2016). Look into my eyes: Investigating joint attention using interactive eye-tracking and fMRI in a developmental sample. *NeuroImage, 130*(2016), 248-260. doi:10.1016/j.neuroimage.2016.02.026

O'Connor, K. W., & Schmidt, G. B. (2015). "Facebook Fired": Legal standards for social media-based terminations of K-12 public school teachers. *SAGE journals, 5*(1), 1-11. doi:10.1177/2158244015575636

Orellana, A. (2009). Class size and interaction in online courses. In A. Orellana, T. L. Hudgins, & M. Simonson (Eds.), *The perfect online course: Best practices for designing and teaching.* (pp. 127-156). Charlotte, NC: Information Age.

Parry, D. (2011). Mobile perspectives: On teaching mobile literacy. *EDUCAUSE Review, 46*(2), 14-16.

Pawlak, R., Magarinos, A. M., Melchor, J., McEwen, B., & Strickland, S. (2003). Tissue plasminogen activator in the amygdala is critical for stress-induced anxiety-like behavior. *Nature Neuroscience, 6*(2), 168-74. doi:10.1038/nn998

Penjor, S., & Zander, P. (2016). Predicting virtual learning environment adoption: A case study. *TOJET: The Turkish Online Journal of Educational Technology, 15*(1), 69-81.

Periáñez, J. A., & Barceló, F. (2009). Updating sensory "versus" task representations during task-switching: Insights from cognitive brain potentials in humans. *Neuropsychologia, 47*(4), 1160-1172.

Pfeifer, J. H., & Blakemore, S. (2012). Adolescent social cognitive and affective neuroscience: Past, present, and future. *Social Cognitive and Affective Neuroscience, 7*(1), 1-10. doi:10.1093/scan/nsr099

Phillips, M. (2014, May 20). *A place for learning: The physical environment of classrooms.* Retrieved from https://www.edutopia.org/blog/the-physical -environment-of-classrooms-mark-phillips

Pimentel, S. (2013). *College and career readiness standards for adult education: National meeting for adult education state directors.* Retrieved from https://www.vrae.org/images/customer-files/ccrstandardsadulted.pdf

Posner, M. I., & Rothbart, M. K. (2007). Research on attention networks as a model for the integration of psychological science. *Annual Review of Psychology, 58*(2007), 1-23.

Raileanu, B. (2019). An e-learning model in a systems theory approach. *The International Scientific Conference eLearning and Software for Education, 2*, 430-437. doi:10.12753/2066-026X-19-129

Reisetter, M., & Boris, G. (2009). What works: Student perceptions of effective elements in online learning. In A. Orellana, T. L. Hudgins, & M. Simonson (Eds.), *The perfect online course: Best practices for designing and teaching*. (pp. 157-178). Charlotte, NC: Information Age.

Rheingold, H. (2010). Attention, and other 21st-century social media literacies. *EDUCAUSE Review, 45*(5), 14-16.

Rodesiler, L. (2017). Local social media policies governing teachers' professionally oriented participation online: A content analysis. TechTrends, 61, 293-300. doi

:10.1007/s11528-016-0139-z

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.

Sadaf, A., & Johnson, B. L. (2017). Teachers' beliefs about integrating digital literacy into classroom practice: An investigation based on the Theory of Planned Behavior. *Journal of Digital Learning in Teacher Education, 33*(4), p. 129-137, doi:10.1080/21532974.2017.1347534

Sahin, I., & Thompson, A. (2006). Using Rogers' theory to interpret instructional computer use by COE faculty. *Journal of Research on Technology in Education, 39*(1), 81-104.

Sarwar, B., Zulfiqar, S., Aziz, S., & Ejaz Chandia, K. (2019). Usage of social media tools for collaborative learning: The effect on learning success with the moderating role of cyberbullying. *Journal of Educational Computing Research, 57*(1), 246-279. doi:10.1177/0735633117748415

Schmidt, S. W., Tschida, C. M., & Hodge, E. M. (2016). How faculty learn to teach online: What administrators need to know. *Online Journal of Distance Learning Administration, 19*(1), 1-8.

Seaman, J., & Tinti-Kane, H. (2013). *Social media for teaching and learning*. Retrieved from http://www.onlinelearningsurvey.com/reports/social-media-for-teaching-and-learning-2013-report.pdf

Seel, N. M. (2008). Empirical perspectives on memory and motivation. In J. M. Spector, M. D. Merrill, J. van Merrienboer, & M. P. Driscoll (Eds.), *Handbook of research on educational communications and technology* (3rd ed., pp. 39-54). New York, NY: Taylor and Francis.

Shao, R. M. (2012). *Faculty concerns about and perceptions of adopting instructional technology at Tumaini University, Tanzania* (Unpublished doctoral dissertation). Nova Southeastern University, Fort Lauderdale, Florida.

Sharp, J. (2014). *Student Connectedness and the perceptions of community of inquiry presences in online instruction* (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3584788)

Sheese, B. E., Voelker, P., Posner, M. I., & Rothbart, M. K. (2009). Genetic variation influences on the early development of reactive emotions and their regulation by attention. *Cognitive Neuropsychiatry, 14*(4-5), 332-355. doi:10.1080 /13546800902844064

Shensa, A., Escobar-Viera, C. G., Sidani, J. E., Bowman, N. D., Marshal, M. P., & Primack, B. A. (2017). Problematic social media use and depressive symptoms among U.S. young adults: A nationally-representative study. *Social Science & Medicine, 182*, 150-157. doi:10.1016/j.socscimed.2017.03.061

Short, B. J. (2012). *21st century skills development: Learning in digital communities-- technology and collaboration* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3523395)

Showalter, M. W. (2012). *What impact does social media have on knowledge transfer?* (Master's thesis). Retrieved from ProQuest Dissertations & Theses Global. (1511519)

Sim, T. Y., Naidu, D., & Apparasamy, D. (2014). Improving students engagement through social media: A case study of a private university in Malaysia using

Facebook. *International Journal of e-Education, e-Business, e-Management and e-Learning*, *4*(6), 396-409. doi:10.17706/IJEEEE.2014.V4.354

Simonson, M., Smaldino, S., & Zvaceck, S. (2015). *Teaching and learning at a distance: Foundations of distance education* (6th ed.). Charlotte, NC: Information Age.

Smaldino, S. E., Lowther, D. L., Russell, J. D., & Mims, C. (2015). *Instructional technology and media for learning* (11th ed.). Upper Saddle River, NJ: Prentice Hall.

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method, and research*. London, UK: Sage.

Smith, J. J., & Dobson, E. (2011). Beyond the book: Using Web 2.0 Tools to Develop 12st Century Literacies. *Computers in the Schools, 28*(4), 316-327. doi:10.1080 /07380569.2011.620939

Smith, R. (2017, June 25). *ISTE releases new standards for educators to maximize learning for all students using technology* [web log comment]. Retrieved from https://www.iste.org/explore/articleDetail?articleid=1014

Smythe, S., Toohey, K., & Dagenais, D. (2014). Video making, production pedagogies, and educational policy. *Educational Policy, 30*(5), 740-770.

Speranza, A. (2014). Why schools are going Ga-Ga for Google. *Australian Educational Leader Journal of the Australian Council for Educational Leaders, 36*(2), 53-55.

Stewart, O. G. (2017). What counts as writing? An examination of students' use of social media platforms as alternative authoring paths (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (10607816).

Tabari, O. A. (2016). *Diffusion of innovation in social media: How college students of Hawaii Pacific University are adopting social media* (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (10189386)

The Secretary's Commission on Achieving Necessary Skills [SCANS]. (1991). *What work requires of schools: A SCANS report for America 2000*. Retrieved from https://wdr.doleta.gov/scans/whatwork/whatwork.pdf

Thornburg, D. D. (2012, May 2). *David Thornburg on the evolving classroom (Big thinkers series)* [video file]. Retrieved from https://www.edutopia.org/david -thornburg-future-classroom-video

Thornburg, D. D. (2016, April 14). *Why the maker movement is meaningful in education* [Web log comment]. Retrieved from https://thornburgthoughts.wordpress.com /2016/04/14/why-the-maker-movement-is-meaningful-in-education/

Thunman, E., & Persson, M. (2018) Ethical dilemmas on social media: Swedish secondary teachers' boundary management on Facebook. *Teacher Development, 22*(2), 175-190, doi:10.1080/13664530.2017.1371634

Tour, E. (2017) Teachers' self-initiated professional learning through Personal Learning Networks. *Technology, Pedagogy and Education, 26*(2), 179-192. doi:10.1080 /1475939X.2016.1196236

United States Department of Education [USDOE]. (2010). *Transforming American education: Learning powered by technology*. Retrieved from https://www.ed .gov/sites/default/files/netp2010.pdf

United States Department of Education [USDOE]. (2017a). *Open education*. Retrieved from https://tech.ed.gov/open/

United States Department of Education [USDOE]. (2017b). *US. Department of Education strategic plan for fiscal years 2014-2018*. Retrieved from https://www2.ed.gov/about/reports/strat/plan2014-18/strategic-plan.pdf

VanKooten, C., & Berkley, A. (2016). Messy Problem-Exploring through Video in First-Year Writing: Assessing What Counts. *Computers and Composition*, *40*, 151-163. doi:10.1016/j.compcom.2016.04.001

van Laar, E., van Deursen, A. J. A. M., van Dijk, J. A. G. M., & de Haan, J. (2017). The relation between 21st-century skills and digital skills: A systematic literature review. *Computers in Human Behavior, 72*, 577-588.

Visser, J. (2015) Learning in a world of blurred boundaries. M. G. Moore (Ed.), *Handbook of Distance Education* (pp. 695-713). Mahwah, NJ: Erlbaum.

Vohra, S. (2016). *How social presence on twitter impacts student engagement and learning in a grade 8 mathematics classroom* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (10123835)

Wagner, A. D., Schacter, D. L., Rotte, M., Koutstaal, W., Maril, A., Dale, A. M., . . . , & Buckner, R. L. (1998). Building memories: Remembering and forgetting of verbal experiences as predicted by brain activity. *Science, 281*, 1188-1191.

Wagner, G. A. (2017). *Ninth-grade students' perceptions of social media responsibility & cyberbullying* (Doctoral Dissertation). Retrieved from ProQuest Dissertations & Theses Global. (10258866)

Wagner, T. (2008). *The global achievement gap.* New York, NY: Basic Books.

Walster, D. (2017). Information policy and social media: Accept or decline. *TechTrends, 61*(3), 301-307. doi:10.1007/s11528-017-0179-z

Wang, Y. (2016). Getting personal! Twitter communication between school districts, superintendents, and the public. *Journal of School Leadership, 26*(5), 865-890.

Wanstreet, C. E. (2009). Interaction in online learning environments. In A. Orellana, T. L. Hudgins, & M. Simonson (Eds.), *The perfect online course: Best practices for designing and teaching.* (pp. 425-442). Charlotte, NC: Information Age.

Watts Simonds, V., & Rud, R. E. (2016, August 1). *Diffusion of innovations*. Retrieved from https://www.britannica.com/print/article/2073740

White, P., & Forrester-Jones, R. (2019). Valuing e-inclusion: Social media and the social networks of adolescents with intellectual disability. Journal of Intellectual Disabilities: JOID, 1-17. doi:10.1177/1744629518821240

Wilson, K., & Korn, J. H. (2007). Topical articles: Attention during lectures--beyond ten minutes. *Teaching of Psychology, 34*(2), 85-89.

Wong, C., Tan, G. W., Loke, S., & Ooi, K. (2015). Adoption of mobile social networking sites for learning? *Online Information Review*, *39*(6), 762-778.

Wordell, P. (2014). *Creating social media policy in high schools* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (3645443)

Xia, S., Foxe, J. J., Sroubek, A. E., Branch, C., & Li, X. (2014). Topological organization of the "small-world" visual attention network in children with attention deficit /hyperactivity disorder (ADHD). *Frontiers in Human Neuroscience, 8*, 14. doi:10.3389/fnhum.2014.00162

Zimiles, H. (1982, September). *The changing American child: The perspective of educators.* Paper presented at a meeting of the National Commission on Excellence in Education, New York, NY.

Appendix A

Interview Protocol

Time of Interview:

Date:

Place/location of Interviewee:

Interviewer:

Interviewee:

Hello! Thank you for taking time from your day to participate in this study. This is a study regarding the experiences of educational professionals engaging in the application of social media for development of academic and digital literacy skills. I am hoping to gain an understanding of the issues influencing the use of social media in public Kindergarten to twelfth (K-12) education system.

If you are at any time uncomfortable with a question or need a break, please let me know. I will stop the interview, and I will do everything I can to restore your comfort level. As a reminder, the interview will be recorded and transcribed. If you need to take a break, the recording of the interview will be paused until you are ready to continue. I ask that you provide as much information as possible, and I thank you in advance for your cooperation and participation in this interview protocol. Your responses will be kept confidential. I will assign you a generic name, such as Participant A or Participant B. I will be the only person who will know the identity related to your code name.

Before I begin asking questions, let me explain the process I will use in this interview.

I will give you an introduction to each series of questions that I will ask with related questions under several different topics. I will audio-record your responses, and I will transcribe them later for data analysis. After the transcription process is finished, I will provide you with the transcript of your interview requesting your help to correct, clarify, or elaborate on your transcribed responses to ensure they are accurately representing your experiences. I respect your privacy, and I will treat your responses with confidentiality.

I have arranged the interview questions into sections with an introduction to each series of questions I will ask. Please ask me to stop at any time you have a question, do not understand the question, or need clarification. I will stop and provide you with an explanation or clarification. Let me start with clarifying some terms that will be used throughout this interview.

21st century skills. Smaldino et al. (2015), provides a definition by Partnership for 21st century Skills (Battelle for Kids, n.d.) as including the higher-order skills needed for a student to be successful: critical thinking, communication, collaboration, and creativity.

Digital Literacy. Digital literacy is the basic ability to use a computer and office software confidently, safely and effectively; to create and edit images, audio, and video; and to use a web browser and Internet search engines (Department of eLearning, 2015).

Social Media. Social media is interchangeable within the study with social networking, social platforms, and Web 2.0.

Technology. Technology is "Tools" to get the information from the teacher to the learners (Smaldino et al., 2015).

Web 2.0. Web 2.0 differentiates the post-dotcom bubble World Wide Web with its emphasis on social networking, content generated by users, and cloud computing. The 2.0 appellation is used in analogy with common computer software naming conventions to indicate a new, improved version. Web 2.0 includes Twitter®, Google Docs, Skype®, blogs, wikis, Facebook®, Instagram®, Edmodo®, etc. (Smaldino et al., 2015).

First, I am interested in learning about you. I would like to begin by understanding your professional training and responsibilities. I will ask you specific questions so I can gain a clear understanding of your prior experiences of integrating social media in your personal and professional practices.

1. Please tell me about your education and training?

2. Where have you worked, what positions have you held, and how long have you been in those positions?

3. What are your professional and personal experiences with the use of social media?

4. Describe how you have implemented social media in your current or past positions?

5. Describe your experiences in a position that directly allowed you to influence the use of social media for educational reasons.

   a. What were your responsibilities or duties in this position?

   b. How did these experiences influence your opinion on the use of social media in education?

6. Is there anything else I should know about your professional experience in regards to social media use for educational purposes?

The next set of questions is regarding how experiences influence personal beliefs on the integration of social media learning platforms in the classroom.

1. Describe how your experiences influence your personal beliefs on the integration of social media in the classroom.

2. Describe how your personal beliefs influence the integration of social media in the classroom.

3. Describe how your self-efficacy perceptions influence how you use and how often you use social media for educational reasons.

4. Describe a time from your experience when social media was involved in an inappropriate student-educator relationship.
   a. What was the role of social media in this incident?

   b. How did that impact your personal beliefs in using social media for

      educational purposes?

5. Explain how your personal beliefs are influenced by the current social media use policy at your school/school district.

The next set of questions is about how experiences of professional development received direct the safe and effective application of social media learning platforms.

1. Based on your experiences, what professional development is available to prepare classroom teachers to use social media in the classroom?

   a. What professional development should be made available to educators

      to effectively and appropriately implement social media to influence

      academic and digital literacy skills?

   b. How can the professional development received influence the use of

      social media for educational purposes?

2. Describe the professional development you have received in your work place to use social media for educational purposes?

3. Describe a time when you received professional development at work through the use of social learning platforms or social media, and how did that influence your practices?

4. Describe the professional development you have received during your educational degree to use social media for educational purposes?

5. Describe a time when you received instruction throughout college where the instructor used social learning platforms or social media, and how did that influence your practices?

6. Explain how often you have experienced professional development with the use of social media or social learning platforms, and how they have shaped your personal efficacy in social media educational use.

7. Describe any training made available to educators in response to a situation where social media was inappropriately used, and how did educators respond to this training?

The next set of questions are regarding experiences in the use of social media learning platforms as a tool for digital literacy instruction.

1. Based on your experiences, what are your perceptions about the appropriate use of social media for educational purposes?

2. Based on your experiences, what are your perceptions about the inappropriate use of social media for educational purposes?

3. How did you or individuals in charge handle the situation where social media was inappropriately used?

4. Describe how this situation impacted the educational professional, the students, and the policy pertaining to social media use.

5. According to your experiences, how can the use of social media platforms contribute to increasing student academic achievement?

6. How familiar are you with digital literacy skills?

7. Based on your experiences, how can the use of social media platforms influence learners' digital literacy skills?

The next set of questions are about experiences on the development of safe and appropriate educational use of social media learning platforms policies.

1. What are your perceptions about what social media platforms can contribute to increasing student academic achievement and digital literacy?

2. Explain how familiar you are with the social media use policy in your school and in your district.

3. Based on your experiences, how closely is the current social media use policy being implemented and enforced in your school and school district?

4. Describe your level of involvement in the development of the social media policy, and how does that influence your use of social media for educational purposes?

5. Based on your experiences, what legal and ethical considerations should be followed in the development of social media policy?

6. Explain how a social media use policy should impact safe student-educator relationships?

7. Based on your experiences, explain the role social media plays in the student-educator relationships.

8. Based on your experiences, how do supervising administrators in your school influence the use of social media for educational purposes?

Follow up: Is there anything else that you would like to add regarding factors influencing the safe use of social medial in the public education system? Are there other things that you can think about that would help me to understand the beliefs, attitudes, and perceptions based on the experiences of using social media to develop students' digital literacy?

Thank you for your time.

Appendix B

Final Themes

Themes	Supporting Emergent Themes
Improving Learning Experiences	• Improved access to learning • Increased learning conditions • Improved learning experiences • Improved motivation • Powerful learning and assessment tool
Safe Social-Media Use	• Encourage educational use • Exposes bullying • Personal accountability • Self-efficacy vs. usefulness • Use of Safeguards • Teaching digital citizenship
Professional Development Advantage	• Available PD • Higher education PD • Needed PD • Positive outcomes
Shift in Focus	• Concerns of implementation without PD • Shift negative situation to learning experiences • Rate of Implementation • Shift in Focus
Educator Role	• Educator role • Mixed response
Development of Higher-Order Skills	• Communication and collaboration • Creative projects • Critical thinking or problem solving • Educator PD • Parental engagement • Reduce language, physical, or learning barriers • Student self-help skills
Digital Literacy Development	• Confidence development • Digital citizenship • Digital literacy • Educator PD • Project-based learning • Student choice
Level of Educator Involvement	• Administration support • Educator PD • Enforcement of policy • Level of engagement
Legal and Ethical Considerations	• Clearly defined • Equitable access • Parental Engagement • Privacy • Safety

Note. Supporting emergent themes are listed in alphabetical order.