ABSTRACT

EDUCATION AND SOCIAL MEDIA: AN EXAMINATION OF FACEBOOK, TWITTER AND YOUTUBE IN K-12 EDUCATION

The prominence of social media in people’s lives has prompted the discussion of social media use in education. Educators are especially interested in the role that social media can play in the teaching and learning process. Despite the growing literature on social media use in education, very little research is available concerning the usage and implementation of social media into the K-12 classroom. This study will examine the use of the three most popular social media sites: Facebook, Twitter and YouTube, and the use of these technologies in K-12 education. This paper presents the results of a descriptive and exploratory survey that assesses if, and how, educators at the K-12 grade levels are using social media in the classroom. Results show that educators are more likely to implement YouTube into course curriculum than Facebook and Twitter. Results of the study also indicate that educators at the secondary (9-12) grade levels are more likely to implement social media technologies in the classroom and that social media use in the classroom is related to student engagement. Furthermore, the results of the study demonstrate that educators recognize the educational value of social media technologies.

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EDUCATION AND SOCIAL MEDIA: AN EXAMINATION OF FACEBOOK, TWITTER AND YOUTUBE IN K-12 EDUCATION

by

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APPROVED

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CHAPTER 1: INTRODUCTION

Social media is a term that includes technologies that enable people to communicate and interact with each other. Social media also includes social networking sites, such as Facebook and Twitter, and other information-sharing sites, such as YouTube, that allow users to interact via the Internet. These sites offer a new way of communication and collaboration in multiple arenas: social, political, and educational (Corbeil & Corbeil, 2011).

People of all ages have embraced the social media phenomenon. A 2012 Pew Internet study (Rainie, Smith, Schlozman, Brady, & Verba, 2012) found that 92% of young adults ages 18-29 use social networking sites, while 73% of those ages 30-49, and 57% of those ages 50-64, frequent social networking sites. According to the Pew Internet & American Life Project (Lenhart, Purcell, Smith, & Zickhur, 2010), 93% of young people ages 12-17 go online; 73% of them frequent social-networking sites.

The prominence of social networking sites in people’s lives, especially students, has prompted the discussion of social media use in education (Selwyn, 2009). Today’s students have grown up using the Internet (Baird & Fisher, 2005). Indeed, by the time they reach high school, about 90% of them will have used a social networking site (Ramig, 2009). These students know how to use social media and have become accustomed to getting information from the Internet whenever necessary. They use the Internet and social media for a variety of reasons on a daily basis and expect to use technology in their learning and education (Baird & Fisher, 2005).

As a result of their frequent Internet use and online activity, today’s students have developed new ways of understanding and processing information
(Baird & Fisher, 2005). Elizabeth City, a professor at Harvard Graduate School of Education, focused specifically on the impact of social media, saying it allows students to develop “lifelong learning portfolios”; problem solve “with others outside of their physical spaces”; create “things that are new, unique, and valuable”; and share these creations “with the world” (Schachter, 2011, p. 32).

The pervasive use of social media by young people of all ages has prompted educators to examine how these media might be used to engage students in the learning process (Davis, 2011). Specifically, Schachter (2011) says that “…administrators and teachers are beginning to leverage the interactive and multimedia features of social networks that have the added advantage of being widely and easily accessible—and free” (p. 27). The wisdom of these efforts has been underscored by research, which has found that sites such as Facebook, Twitter, and YouTube can be used in ways to motivate and engage students in the educational process (Duffy, 2008; Gerlich, Browning, & Westermann, 2010; Junco, Heibergert, & Loken, 2010; Okoro, 2012).

Purpose, Scope, and Significance of the Study

Although social media, including social networking sites, offer a new way of communication and collaboration and can be used as powerful academic tools that enhance the teaching and learning process (Corbeil & Corbeil, 2011), important questions remain unanswered in three key areas. First, while studies have shown that educators recognize the potential benefits of incorporating social media into the educational process (edWeb, MCH Strategic Data, & MMS Education, 2012), just how these media are used in the classroom remains underexplored. Second, while much is known about social media use in post-secondary higher education (i.e., college and university), there are very few
studies that look at the implementation of social media in K-12 instruction (Junco, 2011a, 2011b; Junco, Heibergert, & Loken, 2010; Selwyn, 2009; Silius et al., 2010). Finally, while several studies have examined how students use social media, little attention has been paid to how educators use it in the classroom.

With the aforementioned as points of departure, this study looks at how educators use and implement social media in the K-12 classroom. Specifically, it centers on the results of a survey of 400 K-12 educators and seeks to shed light on if, and how, social media is being used in the K-12 classroom. The study looks at the usage and implementation of three popular social media sites, Facebook, Twitter and YouTube in course curriculum. The study examines if, and how, educators are using these social media technologies to guide instruction, disseminate course content, and enhance the overall learning process for students. Furthermore, the study looks at the relationship between social media use in the classroom and student engagement in the learning process, and examines educators’ beliefs surrounding the value of social media for K-12 education.

**Organization of the Study**

This study comprises five chapters. This chapter introduced the nature of the problem and identified the purpose and scope of the research. The next chapter reviews the major literature on social media, student learning, and student engagement. Because of their popularity and resonance with students, short histories of the social media sites Facebook, Twitter and YouTube are also provided in Chapter 2. Chapter 3 provides an overview of the methodology used to perform the study. The results of the survey are presented in chapter 4. Finally, chapter 5 summarizes the findings, identifies the limitations of the study, and suggests directions for future research on the subject.
CHAPTER 2: LITERATURE REVIEW

The present study is grounded in theories of social learning and development. This chapter will lay out the key concepts of these theories, with an emphasis on how they can be applied in an educational setting in which social media plays a central role. Literature relevant to the current use of social media in education will be summarized. In addition, the three most popular sites among young people and, thus, central to this study—Facebook, Twitter, and YouTube—will be examined in detail.

Social Learning Theory

*Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally though modeling: from observing others on forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action – Albert Bandura, 1977*

Albert Bandura (1977) pioneered the concept of social learning, which is the idea that people learn in a social setting. The theory he developed posits that people learn behaviors in a social context and that people, especially children, learn observationally through the process of modeling. Three concepts are key to Bandura’s social learning theory: 1) observational learning, 2) reinforcement, and 3) the modeling process.

The first core concept of social learning theory – observational learning – is the idea that people learn by observing others in a social setting. According to Bandura (1977), “virtually all learning phenomena resulting from direct experience occur on a vicarious basis by observing other people’s behavior and its consequences for them” (p. 12). In other words, people will learn and exhibit
behaviors through the observation of those around them. Those behaviors that seem to be more effective for others are more likely to be emulated. The behaviors and actions of others can serve as “social cues” to help people act in certain ways in order to achieve certain outcomes. People will behave in various ways in order to achieve social approval from those around them (Bandura, 1977). Bandura suggests that the social setting provides opportunities for children to learn through observation and modeling. Modeling can occur through a live model (an individual demonstrating a behavior), verbal instruction (directions and explanations of a behavior), or symbolically though the mass media (a real or fictional character in print, television, film, or online media demonstrating a behavior).

Bandura asserts that, in addition to the external environment, internal dispositions, such as an individual’s state of mind, are central to learning. The second core concept of his theory is the idea that intrinsic reinforcement is a necessary component of the learning process. Bandura describes intrinsic reinforcement as in the form of an internal reward – for example, a feeling of pride, confidence, satisfaction, or accomplishment – one attains upon behaving a certain way. Intrinsic reinforcement thus serves as a motivating factor and can play an important part in the learning and development of a child.

As stated earlier, Bandura found that children learn within a social setting by observing those around them. The third core concept of his theory is the idea that modeling is an integral part of the social learning process and models serve as an important source for observational learning. As previously mentioned, Bandura identified three models of observational learning, which include: 1) the live model, in which children learn via the observation of people in their own social environment, which can be their peers, parents, and/or teachers, 2) verbal
instruction, in which children learn from descriptions or explanations of behaviors from another person and, 3) the symbolic model, in which children learn from a real or fictional character via the mass media, such as radio, television, or online media (Bandura, 1977).

Bandura identifies four key components to the process of learning through observation and modeling: 1) attention, 2) retention, 3) reproduction, and 4) motivation. The first component – attention – includes the conditions that make it possible for observational learning to take place. This part of the modeling process requires that for someone to learn, he or she must be paying attention. Thus, if the model or event is interesting to a child, the child will be more likely to pay attention, which will then lead to learning. The second component of the modeling process is retention, which refers to the ability of the learner to store information that makes recall or recognition possible. The ability of the learner to recall information at a later time is vital to the learning process. The third component of the modeling process concerns reproduction, which is the ability of the learner to perform the learned behavior. In addition to recalling the information, the learner must be capable of demonstrating and repeating the learned behavior, which is important for improvement and mastery of a particular subject. The last phase of the modeling process concerns the motivation of the learner. The child must be motivated to repeat and demonstrate the modeled behavior. This is where reinforcement and punishment play a role in the learning process. By observing others’ rewards or punishments, the child may be more likely to model and imitate accepted behaviors.

Bandura’s social learning theory helps to explain how people learn by interacting with and observing others. Bandura’s theory has an important place in the field of education and can provide insight into how children learn from others.
in the classroom environment. Social influences play a role in the development and learning of children and these influences can help to create a positive learning environment for children. Vygotsky’s (1978) social learning and development theory, which is directly related to Bandura’s theory, helps to explain how social influences impact student learning. Vygotsky’s social learning theory and its impact on education will be explored in the following section.

Social Learning Theory and Education

Vygotsky’s (1978) theory of social learning and development is related to Bandura’s social learning theory in that Vygotsky’s main assertion is that social interaction among children plays a fundamental role in the process of cognitive development and learning. Vygotsky developed a socio-cultural approach to development learning theories by outlining how students learn within a social environment. There are three main components to Vygotsky’s social learning theory: 1) Social interaction as integral to cognitive development and learning 2) The More Knowledgeable Other (MKO) and 3) The Zone of Proximal Development (ZPD).

The first component of Vygotsky’s theory suggests that peer interaction plays a pivotal role in the learning process and social factors contribute to increased cognitive development. Vygotsky states that “every function in the child’s cultural development appears twice: first, on the social level, and later, on the individual level; first, between people and then inside the child” (p. 57). Thus, social interaction is necessary for children to develop their mental processes and children learn primarily within a social context. The social/learning community that the child inhabits plays a central role in development and learning.
The second component of Vygotsky’s theory pertains to what is known as *the more knowledgeable other* (MKO). The MKO refers to anyone within the child’s social environment who is more knowledgeable or has a better understanding of a specific task or concept. While the MKO is often the adult figure or teacher, this role can also be filled by a peer or someone younger than the student. The MKO is able to assist the student in development skills or a higher level of learning within the zone of proximal development.

The third component of Vygotsky’s theory pertains to the zone of proximal development. The zone of proximal development is instrumental to understanding how students develop in society and how educators can use pedagogy to assist students in learning and development. Vygostky (1978) defines the zone of proximal development as:

> The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (p. 86)

The zone of proximal development suggests that a child’s interaction with others plays a key role in learning and cognitive development. Thus, the development of a child is intrinsically tied to the societal conditions surrounding the child. Furthermore, full development within the zone of proximal development depends upon the full social interaction of the child in the learning environment.

The concept of the zone of proximal development proposed by Vygotsky suggests that learning occurs and skills are developed by interacting and collaborating with an adult/teacher and with one’s peers. By applying Bandura’s observational learning model, the adult and/or peer tutor (the MKO) can model behaviors or provide verbal instructions the child can imitate. The child may
imitate and internalize the information provided by the models in the learning environment. Thus, the learning and skills that children can develop and master with adult guidance and peer collaboration transcend what they can learn alone. According to Vygotsky, through the collaboration with others within the zone of proximal development, children are most likely to develop and learn skills they will later use on their own. The concept of collaboration will be further developed and discussed in the following section.

**Social Learning Theory and Collaboration**

Collaboration is an important component in the development and education of children. *Collaboration* is best defined as the interaction of students in a group setting, of contributing one’s own abilities and working with others to further one’s learning (Panitz, 1996). The collaborative learning experience suggests that students take a more active role in the learning process. The process of student collaboration allows students to problem-solve and actively aids in the progression of learning and development. Slavin (2009) found that children often model and imitate their peers because they are operating within the same zone of proximal development. Slavin suggests that young people will exhibit more advanced thinking as a result of collaborating and communicating with their peers.

Teachers also play a part in the collaboration process. As previously mentioned, Vygotsky’s (1978) concept of the zone of proximal development suggests that the teacher plays a key role in supporting the student in the process of cognitive development. The teacher assists and provides guidance for the student in the structured-learning environment. The teacher allows for the student to further develop the mind throughout the learning process. Baird and Fisher (2005) found that instruction of students is most optimal when students are fully
engaged in a social learning environment, with proper guidance from a teacher or instructor. The combination of peer and teacher collaboration helps the student to increase their knowledge and furthers the process of development in regards to education and learning (Tudge, 1990).

**Collaboration and a Sense of Community**

Interaction and collaboration that lead to a sense of community is also important to the social development of students. McMillan and Chavis (1986) define *a sense of community* as the feeling people have when they are members of a group in which they hold a vested interest. McMillan and Chavis (1986) identify four components of community: 1) *membership*, which refers to a sense of belonging to a particular community, 2) *influence*, or having a “sense of mattering” towards a particular group, 3) *reinforcement*, which refers to the “integration and fulfillment of needs, and 4) *shared emotional connections*, between the members of the community (p. 9).

Silius, Kailanto, and Tervakari (2011) found that successful interaction and collaboration among students is dependent upon the student’s sense of community as outlined by McMillan and Chavis (1986). According to Silius et al. (2011), students who feel a sense of belonging to a community will exhibit more motivation to study, which lends to an increase in student engagement and learning. Students communicate and connect with their peers through collaborative learning opportunities. Through the process of collaboration and the building of a learning community, students are able to take a more active role in their learning and education. When students take a more active role in their education, it is assumed that there is an increase in student engagement and
learning (Pascarella & Terenzini, 2005; Zhao & Kuh, 2004). The next section will explore student engagement and its impact on learning and development.

**Student Engagement**

*Student engagement* has been defined as “the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1984, p. 297). In his theory of student engagement, Astin (1984) posits that engagement is directly linked to student learning and development. Astin’s (1984) theory of student engagement was based on five key components. As previously mentioned, the first component of Astin’s engagement theory refers to the physical and psychological energy invested by the student. The second part of his theory asserts that engagement occurs along a continuum in which some students are more engaged than others and students may be engaged in different activities and at different levels. The third feature of engagement theory is that engagement has both quantitative and qualitative features that can be measured. The fourth aspect of the theory is that student engagement is directly linked to student learning and development. The fifth and final component of Astin’s engagement theory is that the effectiveness of the educational process is related to the ability of an educator to increase student engagement.

Research has consistently demonstrated that academic engagement is directly linked to academic performance (Junco et al., 2010; Kuh, 2009; Zhao & Kuh, 2004). Zhao and Kuh (2004) found that participation in the learning community is positively related to academic performance and student engagement in educational activities. Zhao and Kuh explained that these educational activities include opportunities for active and collaborative learning and social interactions between students and faculty. In their study on student engagement in higher
education, Zhao and Kuh found participation in the learning community was positively associated with students’ personal and social development, as well as their academic achievement.

Research has found that student engagement is positively related to desired academic outcomes (Kuh, 2009). According to Astin’s (1984) theory of student engagement, the more engaged a student is, the more likely the student is actively participating in the learning process and reaching academic goals. Astin suggests students are able to reach their goals because they are partaking in activities specifically designed to reach them. It can be inferred that educational activities that are designed to engage students will lead to an increase in learning and student achievement. Thus, it is important for educators to implement lessons and activities that are aimed at increasing student engagement.

Social media sites present a platform for social interactions and engagement. As previously mentioned, the popularity of these sites and the amount of time young people spend on them has spurred research on social media and student engagement, primarily at the post-secondary level (Heiberger & Harper, 2008; Junco et al., 2010; Junco, 2011a, 2011b; Selwyn, 2009; Silius et al., 2010). Research conducted by The National Survey of Student Engagement (2012) found that student use of social media is positively associated with student engagement. The study looked at over 19,000 students at 42 colleges and universities and found that students using social media were more engaged in collaborative learning and interaction with faculty. The following section will provide a brief overview of traditional education methods and summarize how implementing social media in the classroom creates a new model for student learning.
Changes in Traditional Education

As educators and schools begin to move towards a 21st century model for teaching, the use of traditional education in America’s schools remains significant. Traditional education has characterized the American educational system for many years and teacher-centered instructional strategies are at the core of this type of instruction. According to the National Education Association (2012), what may have been “considered a good education 50 years ago, however, is no longer enough for success in college, career, and citizenship in the 21st century” (p. 3).

Traditional education, with its focus on direct instruction—including lectures, note taking, reading, textbook and written assignments—remains the primary instructional approach in today’s educational system. However, it is necessary to incorporate and transition to new instructional approaches to better meet the needs of the 21st century student.

In an increasingly technology-saturated culture, traditional educational methods of the past are becoming less relevant for the current generation of students. According to the National Education Association (NEA), students must learn information and technological skills to succeed in today’s economy. Students need to learn critical thinking and problem-solving skills in order to thrive in the workplace (NEA, 2012). Students must also be able to effectively collaborate and communicate with their peers, which will help them to succeed in the future (NEA, 2012). Schools and educators continue to struggle in establishing the role that social media technologies can play in the educational process (Browning, Gerlich, & Westermann, 2011).

Research suggests that it is time for the education community to begin to implement and utilize social media sites in the teaching and learning process (Browning et al., 2011). Because social media is interactive in its nature,
such as Facebook, Twitter and YouTube can provide students with a learner-centered approach to education. The ability to think critically, problem-solve, collaborate and communicate is critical to succeeding in today’s global society (NEA). It is suggested that these 21st century skills can be learned through the implementation and integration of social media into classroom curriculum and the education system as a whole. Social media can be a powerful tool in education in the 21st century (Davis, 2010).

Towards a New Model for Learning: The Learner Centered Approach

The implementation of social media into the education system provides students with new modes of learning and the opportunity for increased cognitive development (Baird & Fisher, 2005). According to Baird and Fisher (2005), social media that enable students to network and interact with their peers provides them with the opportunity to develop their social skills and deepens their learning and skills related to course content. The establishment of the online community via social media gives students a sense of belonging and helps to assist in the learning process. According to Silius et al. (2011),

Social media enhanced learning systems allow students to participate in educational online communities by creating, manipulating and sharing content online, communication and exchanging opinions, connecting with each other, establishing social networks and creating communities for different needs. (p. 21)

By using social media, students are able to participate in the construction of new knowledge while developing relationships with those in their learning community (Baird & Fisher, 2005). In the online learning community students are presented with the opportunity to learn from their peers.
The interactive nature of the Internet and the structure of social media allow and promote student engagement and active participation in the learning process. The learner-centered structure of social media allows students to actively participate in the learning process, as opposed to being passive recipients of information from teachers. Research has shown that the structure of the learner-centered educational model lends to an increase in student motivation (Reigeluth, 1999). Research on education and technology has found that student motivation is higher when using technology for course assignments and activities (Heafner, 2004). In a study on social media and education, Silius et al. (2010) suggest an increased motivation to study when using social media for educational purposes.

In addition, the social media-enhanced, learner-centered approach to education provides students with the opportunity to collaborate with their peers, "utilize critical thinking skills, and develop real-world skills that will benefit them in the future (Reigeluth, 1999). The collaborative learning experience suggests that students take a more active role in the learning process and that students are more likely to develop and learn skills through interaction with their peers. The process of student collaboration via social media allows students to problem-solve and actively aids in the progression of learning and development. In addition, the use of social media provides students with the opportunity to improve technology skills that they can apply for further learning. The potential opportunities for advanced thinking skills and learning are augmented by the implementation of social media into the traditional educational setting.

Social media can be used as an academic tool to enhance communication and collaboration among students and teachers, which can in turn contribute to an increase in student engagement. There are various social media tools that educators use in the classroom and many are turning to sites such as Facebook,
Twitter and YouTube because of their popularity and resonance with students. The next section of this study will examine these three distinct types of social media and their potential implications for education.

**Facebook, Twitter, and YouTube**

Facebook, Twitter, and YouTube are three of the most popular social media sites existing on the Internet today. Social media sites such as these have revolutionized the way people communicate and interact with one another (Browning et al., 2011). As stated previously, students of all ages, especially those at the secondary level (high-school age), frequent social networking sites on a regular basis (Davis, 2010). Sites such as Facebook, Twitter and YouTube, can help to engage and motivate students who are familiar and comfortable with using these sites (Davis, 2011). As a result of their popularity and prevalence the next section will present brief descriptions of Facebook, Twitter and YouTube, including their uses and potential implications for teaching and learning.

**Facebook**

Facebook, founded in 2004 by Mark Zuckerberg, has become a worldwide phenomenon and revolutionized the face of social networking (The New York Times, 2012). Facebook has become such a dominant force in the Internet world that it is now seen as the only potential rival to the Internet giant Google (The New York Times, 2012). As reported at the end of December 2012, Facebook remains the world’s most popular social networking site with more than a billion users (Facebook, 2013). Facebook averages 618 million users per day (Facebook, 2013). The innovative and personal nature of Facebook, combined with an easy-to-navigate interface, has allowed this social network to retain its popularity despite the failure of other social networking sites.
According to the Facebook newsroom, Facebook functions include: timeline, news feed, photos, groups, messages, pages, video calling, and subscriptions (Facebook, 2013). The Facebook timeline function allows users to customize their Facebook page (Facebook, 2013). The news feed shows status updates, wall posts, links, pictures and more based on what the people in one’s network are posting. Facebook members are able to post messages, blogs, links, videos and pictures on the walls and timelines of those in their network.

According to Facebook, the groups function “make[s] it easy to build a space for important groups of people in your life” which may include such groups as family, school teams and clubs/organizations (Facebook, 2013). Messages allow users to communicate with other Facebook users, functioning like an email or text message. Pages include public profiles such as public figures and organizations. The video calling function is a built-in collaboration with Skype that allows users to video chat with other users. The subscriptions function allows users to subscribe to other pages and functions as a news feed, with status updates and various links to articles and other information.

According to The New York Times Facebook business profile page, the site’s “value lies in its dynamic network of social connections and the massive amount of information shared by its users” (The New York Times, 2012). Facebook functions by connecting users via its social network and essentially creates an online community among its users. The various functions that Facebook offers provide users with numerous ways to interact and communicate with other users within their networks.
Facebook and Education

The prevalence of Facebook in today’s society has made its use in education possible. Students and professors of all ages are able to use Facebook to communicate with each other and enhance the learning process (Browning et al., 2011). According to Browning and her colleagues (2011), social networking sites such as Facebook have become the norm and “are a communications medium nearly on par with face-to-face interaction” (p. 6). Educators can create a Facebook page for the course they are teaching, which may include links to the syllabus, lectures, readings, and other assignments (Browning et al., 2011). In addition, teachers can share important information, including testing strategies and links to research and other websites, by posting on Facebook. Students and teachers alike can easily access these pages from their computers or mobile devices.

Facebook provides educators with a way to share information with students whose primary means of obtaining information is via the Internet and mobile phone (Schachter, 2011). The Facebook mobile phone applications allow students to instantly access the site from their personal mobile device. This provides students with an instantaneous means of receiving information related to school and the learning process (Schachter, 2011). Students can respond to teachers by posting comments on Facebook, which can facilitate discussions related to curriculum and course study.

Facebook has the potential to help create a valuable learning community in which students can belong and engage with others in the learning process. Facebook has the power to support peer learning and to allow for collaboration among students (Cerda & Planas, 2011). According to Cerda and Planas (2011),
Facebook provides for a collaborative learning experience by fostering a “virtual community culture” and opportunities for social learning (p. 205).

Social media sites such as Facebook provide many opportunities for learner-centered student experiences. Because of the interactive nature of Facebook, students are able to actively participate in the learning process, which can lead to learner-centered projects, assignments, and many opportunities for “self-directed learning” (Wodzicki, Schwammlein, & Moskaliuk, 2011, p. 10.) Students are taking an active role in the learning process, as opposed to a passive role that the traditional classroom might end up providing. It is important for students to actively participate in the learning process, because it will lead to increased engagement and understanding of course content, learning goals, and objectives.

Twitter

Twitter was developed in 2006 by Obvious Corporation and was quickly adopted as the newest social networking and messaging site (Grosseck & Holotescu, 2008). As reported by Twitter in March 2011, over 1 billion tweets are sent per week, with an average of 140 million tweets per day from over 300 million users (Twitter, 2011). The Pew American Life and Internet Project (Irvine, 2012) found that teens are slowly migrating to Twitter, and membership among young people, age 12 to 17, has doubled to 16% over 2 years. It is estimated that this number has grown and represents a significant increase for teens using Twitter (Irvine, 2012). The Pew Internet project found that the user-friendly nature of Twitter and the mobile-phone applications have most likely lead to an increase in Twitter usage by teens.
Twitter’s rapid growth and diffusion in society is due to its convenience, communication capabilities, and abundance of information. Twitter functions mainly as a microblogging and messaging site, in which users can send or “tweet” information to their social network (Grosseck & Holotescu, 2008). According to Suster (2010), Twitter serves as “an RSS reader, a chat room, instant messaging, a marketing channel, a customer service department and increasingly a data mine” (p. 16). People are increasingly utilizing Twitter to communicate, ask questions, share ideas, and engage in discussion with other users (Grosseck & Holotescu, 2008). The uniqueness behind Twitter is in its microblogging capabilities that limit users to 140 characters per tweet (Grosseck & Holotescu, 2008). This allows for short blog entries and a quick way to disseminate information, messages, or links to a virtually endless amount of information, such as articles, other websites, or videos.

Twitter allows users to communicate and interact with each other in real-time (Grosseck & Hototescu, 2008). Twitter users are able to follow other users and the tweets serve as a source for communication and information. The fact that Twitter is in real time has catapulted the website into the vast medium that it is today. In many cases, Twitter is serving as a place for breaking news, which is then being picked up by the traditional news organizations and media outlets (Suster, 2010). The fact that news organizations are now utilizing Twitter to receive breaking news reinforces the importance of this growing social media site and the impact it can have on education.

**Twitter and Education**

Research has found that if implemented into course curriculum, Twitter can provide students with an interactive learning environment and help to engage
students in the learning process (Davis, 2011). According to Davis (2011), social networking sites, such as Twitter, are increasingly playing a role in education and “educators realize it’s a way to engage students who feel at home on such sites” (p. 114). By implementing Twitter into course curriculum, students are provided with the opportunity to interact with their peers in a collaborative learning environment in order to attain learning goals and objectives. Because of its unique structure and real-time configuration, Twitter can help students to become more effective communicators, in a non-threatening environment. Twitter can help students to develop writing, literacy, and research skills (Grosseck & Holotescu, 2008).

Junco et al. (2010) and Ebner, Lienhardt, Rohs, and Meyer (2010), looked at the use of Twitter for educational purposes at the university level. Ebner et al. (2010) found that Twitter provided students with collaborative learning opportunities and teachers with a means for facilitation of lessons/activities. Junco et al. (2010) found that students and faculty communicating via Twitter helped to create a “vibrant and connected virtual learning community (p. 8). Junco and his colleagues also found that Twitter is beneficial for education because it is used to help students develop their social skills and helps foster academic achievement.

At the K-12 grade levels, Twitter can provide students with the opportunity to ask the teacher and classmates questions related to homework or class projects. Teachers can monitor these sites to determine which students are asking and answering questions (Ramig, 2009). This can help teachers to see which students are completing assignments and participating in the learning process. Twitter can also be a place to start (or continue) class discussions, which promotes critical thinking and facilitates the ongoing learning process. Furthermore, Twitter serves as an information data bank with links to a seemingly endless amount of
information and knowledge that students can utilize both inside and outside of the classroom (Grosseck & Holotescu, 2008).

Twitter is beginning to play a role in schools and districts because it provides teachers and administrators with an additional communication medium for school business (Schachter, 2011). This is especially beneficial in larger school districts in which information must be disseminated to a sizeable population (Schachter, 2011). Administration can keep students and parents informed of school business via Twitter. The Twitter mobile applications allow for messages to be sent as a text message, which provides a convenient way for administrators and teachers to be in contact with both students and parents alike.

Twitter also allows for professional development opportunities for educators and provides teachers with the means to connect with other teachers around the world (Davis, 2010). Twitter can provide educators with recommendations for websites and applications that assist educators in developing lessons and activities for the classroom. Twitter has the potential to essentially transform the current face of today’s educational system and according to some is revolutionizing and improving the way that teachers instruct students (Davis, 2010).

**YouTube**

YouTube is a video-sharing website that allows users to post and view videos while interacting and developing social relationships with other users (Lange, 2007). YouTube contains an extensive array of video content, such as movie clips, television clips, music videos, educational videos, and original/amateur videos. According to comScore (2012), a leading measurer of digital technology, YouTube ranks at the top of video Internet viewing sites. As
reported by YouTube (2013), over 800 million users watch videos on YouTube each month, with over 4 billion hours of video being viewed. YouTube also reported that 72 hours of video are uploaded every minute to YouTube and there were more than 1 trillion views on YouTube in 2011.

A YouTube webpage usually consists of the following characteristics: the main video, the title of the video, tags (or keywords) for a video, links to related or similar videos, comments on each video, the number of views, ratings, and the ability to flag a video with inappropriate content (Duffy, 2008). Registered users can create and upload their own videos, and unregistered users can view most of the videos and content on YouTube (Duffy, 2008). In addition, registered YouTube users can create their own channel, or YouTube page, which includes a short personal description along with videos. YouTube users can subscribe to other users’ channels, which connect the users into a social network.

According to Dreon, Kerper, and Landis (2011), “the viral video is the cultural currency of today’s youth” and teachers can use YouTube in a way to connect with young people and make content matter relevant for students. Because of the increasingly large population of young people viewing and sharing videos, YouTube is currently being examined as a teaching and learning tool (Duffy, 2008). YouTube can be used to foster course dialogue, analysis, creativity, and innovation. YouTube can also be implemented into the educational process by creating “a learning community where everyone has a voice” (Duffy, 2008, p. 125). By implementing YouTube into the educational process, teachers are providing students with a learning environment in which they can thrive.
YouTube and Education

Today’s generation of learners “absorb information quickly, in images and video” (Duffy, 2008, p. 119), thus YouTube provides teachers with a learning tool to use in education. According to Duffy (2008), video sharing in the form of YouTube is changing how students interact with each other and how content is created and shared. There are many educational benefits to implementing YouTube in the classroom and positive implications for teaching and learning. The fact that students and teachers alike utilize YouTube on a daily basis makes it an easy tool to implement into the educational process.

YouTube has embraced the teaching and learning process by offering pages dedicated strictly to education. According to YouTube, the YouTube EDU page “brings learners and educators together in a global video classroom” (YouTube, 2013). YouTube encourages teachers to “educate, engage, and inspire your students with video” (YouTube, 2013). The features of the YouTube EDU page allow users to “teach, learn, and create” by providing links to K-12 education videos that educators can use in the classroom. On this page, users can view educational videos, which include academic lectures from universities and lessons from teachers around the world. Teachers can utilize this page, as well as other YouTube videos that will enhance lessons and expand the world to which students are exposed. The education page, as well as a page dedicated exclusively to teachers, provides a wealth of information and resources for teachers and students.

In addition to the education and teacher pages, YouTube provides students with the opportunity to use social media to obtain and share information (Duffy, 2008). Students can create videos of classroom activities and exercises and upload them to YouTube (Schachter, 2011). Educators can also upload and publish videos related to course material and content to YouTube and have students access
these videos in the classroom or at home with relative ease (Browning et al., 2011). Research has found that 500 years of videos are included on YouTube and watched daily via Facebook, while 700 YouTube videos are shared each minute via Twitter (YouTube, 2013). YouTube video clips can easily be shared on Facebook and Twitter, thus allowing for the implementation of multiple social media sites in the classroom. Students can access these websites at home to review concepts, catch up on missed lectures and assignments, and to enhance learning.

YouTube is playing an increasingly influential role in many classrooms because of its potential to positively impact student learning. According to Duffy (2008), “a new media, video-enhanced curriculum can be invaluable for expanding the learning experience” and video content itself “can be a powerful educational and motivational tool” (pp. 124-125). By implementing a popular and familiar medium like YouTube into the curriculum, educators hope to engage students and get them excited about learning (Duffy, 2008). It is important for educators to make course content relevant to students, and the use of YouTube can provide the relevancy and connections that many young people are looking for (Dreon et al., 2011). Specific YouTube features, such as video comments and responses, provide opportunities for collaborative media sharing and assessment (Duffy, 2008). YouTube requires participation from its users and thus can lead to increased student engagement and cooperative learning opportunities.

Obstacles to Social Media Use and Safety Concerns in the School Setting

Although research has shown that there are benefits to implementing social media in the classroom, it is imperative that teachers explain the importance and educational value when such technology is used in the classroom. It is especially important when these social media sites include Facebook, Twitter and YouTube
because these sites can be accessed by virtually anyone. Educators must provide clear standards for social media usage and take the appropriate security precautions necessary for student use of these technologies.

Many school districts and administrators are skeptical that social media actually benefits education and are worried that social media implementation in the classroom can lead to Internet security problems (Davis, 2010). Davis (2010) points out that there are federal laws, such as the Children’s Internet Protection Act (CIPA), that requires schools to have Internet filtering programs and the Children’s Online Privacy Protection Act of 1998 (COPPA) that protects children’s privacy and bans most children under the age of 13 from using a multitude of websites (Davis, 2010). These laws make it difficult for many school districts (especially at the K-8 level) to implement social media technologies in the classroom.

As a result of Internet security concerns and the potential for cyber bullying, research has found that both Facebook and Twitter are blocked by many school districts and that it is difficult to access these sites on school campuses (Davis, 2010; Schachter, 2011). Many researchers have found that inappropriate behavior and cyber bullying are potential threats that exist with student use of social media (Davis, 2010; Schachter, 2011). The Pew Internet and American Life Project (Lenhart, 2007) found that 32% of online teenagers have experienced online harassment or cyber bullying, with this number estimated to be even higher today. Because of these safety concerns, many K-12 educators interested in using social media in course curriculum often face obstacles when trying to incorporate social media into the traditional classroom (Davis, 2010).
Research Questions and Hypotheses

As research has shown, the rise of new technologies and social media sites are beginning to transform the educational system of the 21st century and have the potential to change the way teachers are presenting information and students are obtaining, processing and learning information. At the same time, the specific social media sites used by teachers, and the extent to which these sites are used in the classroom, have been largely unexplored by scholars. Most research on social media in education has focused on its use in post-secondary education. It is therefore useful to study how K-12 educators are using social media in education, especially at the secondary level.

To further understand how social media are being implemented into curriculum, and with what results, this study poses the following research questions (RQ) and hypotheses (H):

RQ1: From which, if any, social media sites do educators use to relay information to students?

RQ2: From which, if any, social media sites do educators receive information from to use in classroom lectures, assignments, and/or classroom activities?

RQ3a: Is there a difference in grade level and implementation of Facebook in course curriculum?

RQ3b: Is there a difference in grade level and implementation of Twitter in course curriculum?

RQ3c: Is there a difference in grade level and implementation of YouTube in course curriculum?

RQ4a: Is there a difference in age of educator and implementation of Facebook in course curriculum?
RQ4b: Is there a difference in age of educator and implementation of Twitter in course curriculum?

RQ4c: Is there a difference in age of educator and implementation of YouTube in course curriculum?

RQ5a: Is there a difference in educators’ use of Facebook in the classroom and student engagement?

RQ5b: Is there a difference in educators’ use of Twitter in the classroom and student engagement?

RQ5c: Is there a difference in educators’ use of YouTube in the classroom and student engagement?

H1a: Educators that lack access to Facebook will use Facebook in course curriculum less than educators that have more access to Facebook.

H1b: Educators that lack access to Twitter will use Twitter in course curriculum less than educators that have more access to Twitter.

H1c: Educators that lack access to YouTube will use YouTube in course curriculum less than educators that have more access to YouTube.

H2a: Educators that use Facebook for personal use will see more of an educational value in social media.

H2b: Educators that use Twitter for personal use will see more of an educational value in social media.

H2c: Educators that use YouTube for personal use will see more of an educational value in social media.

This chapter reviewed the major literature on student learning, student engagement, and social media. The next chapter will describe the methodology used to answer the research questions and test the hypotheses relevant to the study.
CHAPTER 3: METHODS

Sample

This study utilized a combination of several non-random sampling methods: quota, known groups and snowball sampling. The study gathered completed surveys from 400 K-12 educators, primarily from the United States (390 respondents) with 10 respondents from countries other than the United States. Respondents included teachers, as well as K-12 school administrators (who at one time were teachers). Out of the 400 respondents who participated in the study, 259 (64.8 %) were female and 134 (33.5%) were male, while 7 respondents did not respond to the question. A large number of the respondents were from the Central Valley region of California with a total of 166 (41.5%) educators. The respondents living outside of the Central Valley included: 19 (4.8%) from the Los Angeles area, 11 (2.8%) from other Southern California area, 9 (2.3%) from San Francisco/Bay Area, 5 (1.3%) from Inland Empire, 4 (1%) from Other Northern California Area, 2 (0.5%) from Orange County, 2 (0.5%) from Sacramento, 1 (0.3%) from San Diego, and 1 (0.3%) from Central Coast. 180 (44.6%) respondents live outside of California. The majority of respondents (170) live in cities across the United States, with 10 respondents residing in foreign countries. The sample consisted of a diverse range of ages and included: 34 (8.5%) of respondents were between 18-27 years old, 127 (31.8%) between the 28-37 age range, 96 (24%) were in the 38-47 range, 79 (19.8%) between the ages of 48-57, 47 (11.8%) between 58-67, and 4 (1%) respondents identified as 68 or older. 13 respondents failed to answer the age of educator question.

In addition to demographic and geographic information, respondents also were asked about their years of service in teaching and what grade level they
currently teach. Forty-five (11.3%) of the respondents said they have been teaching for 1-3 years, 61 (15.3%) respondents have been teaching for 4-6 years, 52 (13%) respondents have been teaching for 7-9 years, 46 (11.5%) have been teaching for 10-12 years, 34 (8.5%) have been teaching for 13-15 years, and 139 (34.8%) of respondents have been teaching for 16 or more years. Twenty-three respondents did not respond to the question regarding years of service in teaching. The majority of respondents, 307 (76.8%), reported to teaching at the secondary/high school level (9-12), with 44 (11%) respondents teaching at the primary/elementary level (K-5), 19 (4.8%) teaching at the Intermediate/Middle School level (6-8), and 30 respondents did not respond to the question.

**Measures**

The researcher developed a quantitative survey based on previous research (or lack thereof) and as an exploratory tool to assess how educators use social media in K-12 education and to address the research questions and hypotheses. The first portion of the survey sought basic demographic, geographic and psychographic information, which asked questions such as sex, age, residence (area in California or other), years teaching, and grade level taught. Following the general questions, respondents were asked which, if any, social media sites they have access to and use on a regular basis. The three social media sites that respondents were questioned about included: Facebook, Twitter and YouTube.

Next, the survey questioned how educators use social media in the classroom (i.e., with class lectures, assignments, and/or classroom activities). Respondents were asked whether or not they use information from social media to guide their instruction and implement into assignments and classroom activities.
The survey also asked if educators utilize any of the three social media sites to relay information to students.

In addition, the survey asked how much access educators have to social media sites (Facebook, Twitter, and YouTube) within the school’s walls. Respondents were also asked if they think that access to social media determines how much they use social media for class lectures, assignments, and activities. Respondents were asked if they had more access to social media in the classroom would they utilize these sites more frequently in class lectures, assignments, and activities.

Finally, the survey included questions soliciting respondent’s opinions and beliefs on the value of social media when implemented into the educational system. One question asked if educators see any educational value in social media overall. Another question asked whether or not educators noticed an increase in student engagement when using social media sites in the classroom and course curriculum.

All questions asking about the educators’ use of social media in the classroom and access to social media were assessed using categorical levels of measurement. Those items asking about frequency of use were measured using Likert-type scales. However, these items were converted to categorical data during the statistical analysis. An example of the survey is provided in the Appendix.

Procedures

Once the survey was developed, the researcher utilized SurveyMonkey, a popular online survey tool that allows users to post surveys and collect data. The link to the online survey was distributed via email, message boards and social
media (Facebook and Twitter) in March 2012. In order to get a diverse sample, the survey link was distributed via email to educators in the following areas:

- The Tulare Joint Union High School District in Tulare, California
- California Teachers Association (CTA) Facebook page
- CTA and Department of Education Twitter sites
- Advanced Placement College Board discussion websites

In addition to the above listed areas, the researcher also posted the link on her own Facebook and Twitter accounts and asked other educators to not only take the survey but also to pass the link on to their teaching colleagues. Along with social media, the researcher also sent the survey link to other educators via email. The survey remained open on the SurveyMonkey site for 3 weeks. Once the number of respondents totaled 400, the survey was closed.
CHAPTER 4: RESULTS

To examine all research questions and test the proposed hypotheses, all data were entered into SPSS and assessed using the appropriate statistical tests. All of the questions were assessed using categorical levels of measurement; therefore, crosstab tests were conducted.

Research Questions 1 & 2

RQ1 asked from which, if any, social media sites educators use to relay information to students. In response to RQ1, descriptive statistics were used and found that the majority of educators polled did not use Facebook, Twitter and YouTube to relay information to students. Table 1 shows a breakdown of the results of the social media sites that educators use and don’t use to relay information to students.

Table 1

<table>
<thead>
<tr>
<th>Social Media Site</th>
<th>Use Social Media</th>
<th>Don’t Use Social Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>65 (16.3%)</td>
<td>335 (83.8%)</td>
</tr>
<tr>
<td>Twitter</td>
<td>21 (5.3%)</td>
<td>379 (94.8%)</td>
</tr>
<tr>
<td>YouTube</td>
<td>104 (26%)</td>
<td>296 (74%)</td>
</tr>
</tbody>
</table>

The results demonstrate that the majority of educators do not use social media to relay information to students. The results show that while 65 (16.3%) educators use Facebook to relay information to students, 335 (83.3%) do not use Facebook to relay information to students. Similarly, 21 (5.3%) educators use Twitter to relay information to students, while 379 (94.8%) do not use Twitter to relay information to students. In addition, 104 educators (26%) use YouTube to
relay information to students, while 296 (74%) educators do not use YouTube to relay information to students.

RQ2 asked from which, if any, social media sites educators receive information from to use in classroom lectures, assignments, and/or classroom activities? In response to RQ2, descriptive statistics were used and found that educators do not receive information from Facebook and Twitter; however, educators do tend to use YouTube in classroom lectures, assignments and/or classroom activities. Table 2 shows a breakdown of the results of the social media sites that educators receive information from to use in the classroom.

Table 2

<table>
<thead>
<tr>
<th>Social Media Site</th>
<th>Receive Info from Social Media</th>
<th>Don’t receive Info from Social Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>72 (18%)</td>
<td>328 (82%)</td>
</tr>
<tr>
<td>Twitter</td>
<td>26 (93.5%)</td>
<td>374 (6.5%)</td>
</tr>
<tr>
<td>YouTube</td>
<td>265 (66.3%)</td>
<td>135 (33.8%)</td>
</tr>
</tbody>
</table>

The findings show that the majority of educators using social media receive information from YouTube to use in the classroom. The results demonstrate that 265 (66.3%) educators receive information from YouTube to use in the classroom, while 135 (38%) do not receive information from YouTube. The number of educators that are using Facebook and Twitter is extremely small in size and the vast majority of educators do not receive information from Facebook and Twitter to use in the classroom. The results show that 72 (18%) educators receive information from Facebook to use in the classroom, while 238 (82%) do not receive information from Facebook to use in the classroom. Likewise, 26 (93%)
educators receive information from Twitter, while 374 (6.5%) educators do not receive information from Twitter to use in the classroom.

**Research Question 3 (a-c)**

Research questions 3a-c asked if there was a difference in grade level and implementation of Facebook, Twitter and YouTube in course curriculum. Crosstabs were conducted and found that there was a significant difference in grade level and implementation of Facebook, Twitter and YouTube.

Research question 3a sought to determine if there was a difference in grade level and implementation of Facebook in course curriculum. A significant difference was found \( \chi^2 = (6, N = 400) = 262.19, p < .000 \). There were significantly more secondary (9-12) educators that implement Facebook in course curriculum than elementary (K-5) and middle (6-8) school educators. The results found that there were 24 (6%) of 9-12 grade educators that implement Facebook in course curriculum, while only 1 (0.2%) educator at the K-5 grade level. There were no 6-8th grade educators that implement Facebook in course curriculum.

Research question 3b examined if there was a difference in grade level and implementation of Twitter in course curriculum. A significant difference was found \( \chi^2 = (6, N = 400) = 255.78, p < .000 \). There were significantly more secondary (9-12) educators than elementary (K-5) and middle (6-8) school educators that implement Twitter in course curriculum. The results demonstrate that there were 19 (4.8%) educators that implement Twitter in course curriculum at the 9-12 grade level. On the other hand, there were no educators at the K-5 and 6-8 grade level that implement Twitter in course curriculum.

Finally, research question 3c sought to determine if there was a difference in grade level and implementation of YouTube in course curriculum. A
significant difference was found $X^2 = (6, N = 400) = 280.87$, $p < .000$. There were significantly more secondary (9-12) educators that implement YouTube in course curriculum than elementary (K-5) and middle (6-8) school educators. The results show that there were 220 (55%) educators at the 9-12 grade level that implement YouTube in course curriculum, while only 17 (4.2%) educators at the K-5 grade level, and 8 (2%) educators at the 6-8 grade level that implement YouTube in course curriculum.

**Research Question 4 (a-c)**

To determine if there was a difference in age of educator and implementation of Facebook in course curriculum (RQ4a), a crosstab test was utilized to analyze the data. A significant difference was found $X^2 = (12, N = 400) = 131.66$, $p < .000$. There were more 38-47 (2.5%) year olds that implement Facebook in course curriculum, followed by 28-37 year olds (2%), 48-57 (0.8%), 58-67 (0.8%), 18-27 (0.2%) and 68 years or older (0%).

A crosstab test was calculated to determine if there was a difference in age of educator and implementation of Twitter in course curriculum (RQ4b). A significant difference was found $X^2 = (12, N = 400) = 129.08$, $p < .000$. There were more 38-47 (2%) year olds that implement Twitter in course curriculum, followed by 28-37 year olds (1.8%), 18-27 (0.5%) 48-57 (0.2%), 58-67 (0.2%), and 68 years or older (0%).

To determine if there was a difference in age of educator and implementation of YouTube in course curriculum (RQ4c), a crosstab test was used. A significant difference was found $X^2 = (12, N = 400) = 138.30$, $p < .000$. There were significantly more 28-37 (18.8%) years old that implement YouTube
in course curriculum, followed by 38-47 (15.2%), 48-57 (14%), 18-27 (6.8%), 58-67 (6.5%), and 68 years or older (0.2%).

Research Question 5 (a-c)

In order to find if there was a difference in educators’ use of Facebook in the classroom and student engagement (RQ5a), a crosstab test was used to analyze the data. A significant difference was found $X^2 = (6, N = 400) = 364.73, p < .000$. Educators that implement Facebook in the classroom notice an increase in student engagement when using social media in the classroom. The 6% of educators that implement Facebook in course curriculum noticed an increase in student engagement when using Facebook in the classroom. None of these educators responded in the negative to the question of student engagement.

A crosstab test was calculated to determine if there was a difference in educators’ use of Twitter in the classroom and student engagement (RQ6b). A significant difference was found $X^2 = (6, N = 400) = 354.79, p < .000$. Educators that implement Twitter in the classroom notice an increase in student engagement when using social media in the classroom. The 4.8% of educators that implement Twitter in course curriculum noticed an increase in student engagement when using Twitter in the classroom, and none of these educators responded in the negative to the question of student engagement.

To test if there was a difference in educators’ use of YouTube in the classroom and student engagement (RQ5c) a crosstab test was utilized. A significant difference was found $X^2 = (6, N = 400) = 470.72, p < .000$. Educators that implement YouTube in the classroom noticed an increase in student engagement when using social media in the classroom. The findings show that 52.8% of educators that implement YouTube in course curriculum noticed an
increase in student engagement when using YouTube in the classroom. Only 3.8% of educators that implement YouTube in the classroom reported to not noticing any increase in student engagement when using YouTube in the classroom.

Although the individual number breakdowns for educators using Facebook and Twitter remain small, total numbers indicate that 63.5% of educators noticed an increase in student engagement when using social media in the classroom, while only 5.5% of educators did not notice an increase in student engagement when using social media in the classroom. Overall, educators recognize that students are engaged when using social media for educational purposes in the classroom.

Hypotheses 1 (a-c)

Prior to running the crosstab calculation to test the proposed hypotheses, a descriptive test was used to measure the amount of access that educators have to Facebook, Twitter and YouTube on the school campus. It was found that educators are more likely to have access to YouTube than Facebook and Twitter on their school’s campus. The results showed that 102 (25.5%) educators have access to Facebook on campus, while 260 (65%) do not have access to Facebook, and 103 (25.8%) educators have access to Twitter on their school’s campus, while 246 (61.5%) educators do not have access to Twitter. However, more educators have access to YouTube on their school’s campus with 284 (71%) educators having access to YouTube, while 74 (18.5%) educators do not have access to YouTube on their school’s campus. It was necessary to run the descriptive tests to determine which, if any, social media sites educators have access to on the school campus in order to test the proposed hypotheses (H1a-c).
A crosstab test was calculated to test the proposed hypothesis (H1a) that educators who lack access to Facebook will use Facebook in course curriculum less than educators that have more access to Facebook. A significant difference was found $X^2 = (4, N = 400) = 331.97, p < .000$. H1a was supported. Educators that lack access to Facebook are less likely to implement Facebook in course curriculum than those that have access.

H1b proposed that educators who lack access to Twitter would use Twitter in course curriculum less than educators that have more access to Twitter. A significant difference was found $X^2 = (4, N = 400) = 244.86, p < .000$. H1b was supported. Similar to what was found in H1a; educators that lack access to Twitter are also less likely to implement Twitter in course curriculum than those that have access to the site.

H1c proposed that educators who lack access to YouTube would use YouTube in course curriculum less than educators that have more access to YouTube. A significant difference was found $X^2 = (4, N = 400) = 352.71, p < .000$. H1c was supported and there is a significant difference between educators that lack access to YouTube and those with access to YouTube and implementation in course curriculum. Educators that lack access to YouTube are less likely to implement YouTube in course curriculum than those that have access.

Based on the findings, H1(a-c) were all supported. Educators who lack access to social media sites are more likely to not use these sites in course curriculum. If educators lack access to Facebook, Twitter and YouTube, they are significantly less likely to implement social media technologies in the classroom.
Hypotheses 2 (a-c)

A crosstab test was calculated to test the proposed hypothesis (H2a) that educators who use Facebook for personal use will see more of an educational value in social media. A significant difference was found $X^2 = (2, N = 400) = 31.26$, $p < .000$. H2a is supported. Educators that use Facebook for personal use on a regular basis tend to see more of an educational value in social media. The numbers of educators that use Facebook on a regular basis and see an educational value in social media (62.5%) was significantly higher than educators that do not use Facebook on a regular basis, yet see an educational value in social media (23%).

To test the proposed hypothesis (H2b) that educators who use Twitter for personal use will see more of an educational value in social media, a cross tab test was used. A significant difference was not found $X^2 = (2, N = 400) = 5.51$, $p = .064$. H2b was not supported and educators that use Twitter on a regular basis do not see more of an educational value in social media, than those who do not use Twitter on a regular basis. The numbers of educators that use Twitter on a regular basis and see an educational value in social media (12.5%) is lower than educators that do not use Twitter on a regular basis, yet see an educational value in social media (73%).

A crosstab test was used to test the proposed hypothesis (H2c) that educators who use YouTube for personal use will see more of an educational value in social media. A significant difference was found $X^2 = (2, N = 400) = 25.55$, $p < .000$. H2c was supported and educators that use YouTube on a regular basis see an educational value in social media. The numbers of educators that use YouTube on a regular basis and see an educational value in social media (44.5%)
is higher than educators that do not use YouTube on a regular basis, yet see an educational value in social media (41%).

Based on the findings, H2a and H2c were supported. Educators that use Facebook and YouTube for personal use and on a regular basis saw more of an educational value in social media. However, H2b was not supported. Educators that use Twitter for personal use and on a regular basis saw less of an educational value in Twitter, than educators that do not use Twitter on a regular basis.
CHAPTER 5: DISCUSSION

The main purpose of this study was to discover if, and how, educators use social media in the teaching process, and more specifically, to examine which social media sites K-12 educators are using in the classroom and for what purposes. The study targeted and asked K-12 educators, which, if any, of the top three social media sites (i.e., Facebook, Twitter and YouTube) they are using in the classroom. The following section will summarize the findings of this study and draw conclusions about how social media is or isn’t being used among K-12 educators.

General Discussion

This study adds to the growing literature on social media use in education by examining how K-12 educators utilize social media in course curriculum. The main findings demonstrated that the majority of K-12 educators are not using Facebook and Twitter for academic purposes; however, they are using YouTube in the classroom. The study found that educators use YouTube as an academic tool to receive information to use in course instruction. Educators are implementing YouTube in course curriculum because of the potential benefits that this video-sharing site offers for student learning and engagement. In addition, the findings demonstrated that educators are more likely to have access to YouTube on their school’s campus but those that lack access to social media on their school’s campus are less likely to implement these technologies into course curriculum. The findings of the study also showed that social media technologies are being primarily used by educators at the 9-12 grade levels. Moreover, those educators who are using Facebook, Twitter and YouTube in course curriculum notice an increase in student engagement when these technologies are being used in the
classroom. Finally, the study demonstrated that educators recognize the educational value of social media and the potential benefits of incorporating social media into the educational process.

Research Questions 1 and 2

Research questions 1 and 2 sought to determine if educators are using Facebook, Twitter and YouTube in classroom lectures, assignments, and/or classroom activities and to disseminate information to students. The results found that most educators who participated in the study are not using these social media sites for classroom assignment or activities; however, more educators are using YouTube. The results of the study suggested that the majority of K-12 educators are not using social media, such as Facebook and Twitter in the classroom, which challenges Ramig’s (2009) research that suggested social media is being used in classes from kindergarten to high school. However, Ramig’s results also found that YouTube was the most used social media site that educators employed in the classroom, which is consistent with what the current results showed in this study.

Although researchers, including Ramig (2009), Davis (2010) and Schachter (2011), have discussed the importance behind social media use in the K-12 classroom, there is an absence of research on if, and how, these sites are being implemented into K-12 course curriculum. As previously mentioned, even though some studies have looked at the importance of social media as a means for motivating and engaging students, most efforts have focused on the post-secondary level (Junco et al., 2010; Junco, 2011a, 2001b; Selwyn, 2009; Silius et al., 2010) and not the K-12 grade levels.

The results of this study found that although the majority of K-12 educators are not using Facebook, Twitter and YouTube to disseminate information, they do
seem to be using YouTube to receive information to use in classroom lectures, assignments, and/or activities. This would tend to suggest that educators are using YouTube as a resource for class lectures and activities, and that they are implementing YouTube videos into course curriculum. Research has found that videos can be used as an educational tool to motivate students (Duffy, 2008). Studies have established that YouTube can offer many educational benefits when used in the classroom (Browning et al., 2011; Duffy, 2008). The results of the current study align with previous research that suggests YouTube provides educators with a wealth of information that can be used in course curriculum.

Although some educators seem to be using YouTube to gather course material and implement videos into course lessons, the majority of educators that participated in the current study reported not using YouTube to disseminate information to students. This directly contradicts Duffy’s (2008) research, which found that educators are using YouTube as a pedagogic resource to disseminate information to students. Moreover, the fact that educators are not using YouTube to disseminate information contradicts research that suggests young people have become accustomed to processing information in the digital age and thus YouTube can be used to relay information to students (Browning et al., 2011; Dreon et al., 2011; Duffy, 2008). The results of the current study demonstrated that teachers are employing YouTube to gather information and implement into course curriculum, but are not using YouTube to disseminate information, which research has been found to be an effective instructional tool to reach today’s students.

The results of this study showed that the majority of K-12 educators do not use Facebook to relay information to students. This finding is contradictory to past research conducted by Browning et al. (2011), which determined that Facebook should be used in course curriculum and utilized in course delivery.
Browning et al. found that educators can create a Facebook page to disseminate information by posting links to lectures, readings, and assignments; however, the current study demonstrated that educators are not creating Facebook pages to disseminate course information. Although the findings of the current study contradict Browning’s findings, one reason for this may be due to the samples tested. The Browning et al. study was conducted at the post-secondary (college or university) level while the current study tested K-12 grade levels. The differences in ages and maturity levels of students may play a role in K-12 teachers’ reluctance to use social media in course delivery and instruction. Although the participants of the current study were not asked, some K-12 educators may prefer using other resources that are more specifically designed for education. For instance, sites such as Edmodo, Gaggle and ePals are designed strictly for the academic world and many educators feel more comfortable using these networking sites in the classroom rather than Facebook or other popular social networking sites (Davis, 2011).

Other possible reasons for the inconsistencies between the current research and previous studies may be due factors such as, educators’ skepticism and federal laws that block social media sites (especially Facebook and Twitter) at numerous K-12 schools and districts (Davis, 2010, 2011; Schachter, 2011). Although the participants weren’t asked about these specific reasons for not using social media sites in the classroom, these may have contributed to the contrasting results between previous research and the current study.

Research conducted by the Pew Research Center in 2012 found that teens age 12-17 are slowly migrating to Twitter and the percentage of teenagers using Twitter remains low. This research aligns with the results of the current study that showed the majority of K-12 educators surveyed are not using Twitter in the
classroom. Research has demonstrated that Twitter is used the least by young people as compared to Facebook and YouTube (Irvine, 2012). The Pew study (Irvine, 2012) found that only 16% of teenagers age 12-17 responded to using Twitter. This could be an explanation for why Twitter is the least utilized site out of the three social media sites looked at in this study. The fact that the majority of educators are not using Twitter in course delivery and curriculum directly contradicts prior research that has found educators are using Twitter as an academic tool in the educational process (Ebner et al., 2010; Grosseck & Holotesctu, 2008; Junco et al., 2010; Rankin, 2009). The results of the current study also demonstrated that educators are not using Twitter as a tool to communicate and deliver information, which directly contradicts Schachter’s (2011) research that found schools and districts are increasingly using Twitter as a communications tool to reach students and parents.

The fact that the majority of K-12 educators are not using Twitter in the classroom is similar to Facebook use in that many schools districts have blocked access to this site on school campuses (Davis, 2010; Schachter, 2011). Although educators were not specifically asked about reasons for not using Twitter, many educators may be skeptical about using this social media technology in the classroom. Rankin (2009) found that Twitter could be somewhat limiting in that tweets must consist of 140 characters or less. This may contribute to educators’ hesitations to implement this particular technology in the K-12 classroom.

**Research Question 3 (a-c)**

Research questions 3a-c sought to determine if there was a difference in implementation of social media (Facebook, Twitter, and YouTube) between various grade levels. The results revealed that 9-12 grade educators are
significantly more likely to implement social media (Facebook, Twitter and YouTube) in course curriculum than educators at the elementary (K-5) and middle (6-8) school levels. One reason for these results may be due to the technological skill level of teens in the 9-12 grade levels. For instance, previous research has found that teens and young adults today have highly developed technological skills due to growing up with the Internet (Baird & Fischer, 2005; Wodzicki et al., 2012). In addition, past research (Baird & Fisher, 2005) shows that teenagers favor learning environments that allow them to be active participants, as opposed to passive recipients of information, which may also account for the fact that social media is implemented in education more at the high school level.

Another reason for the results of RQ3a-c may be due to the “learner-centered” structure of social media that Silius and his colleagues’ (2011) study revealed. Silius et al. found that students build learning communities through collaboration and communication with their peers, which allows students to play a more active role in the learning process.

The developmental stage of a child also plays a role in the learning environment and was outlined by Elkonin (1971), which found the late school and youth period to be “characterized by the development of motives for social and societal involvement and methods for mastery of personal relations” (Hedegaard, 1990, p. 351). Educational research has found that for high school students, social interactions with one’s peers play a large role in the learning process and development of students (Eckert, 1989). Social media provides students with an online community that allows students to communicate, collaborate, and learn from others. The late school and youth stage of development as outlined by Elkonin aligns with the ages of students at the 9-12 grade levels. The age and maturity level of a student at the secondary grade levels may play a role in the
ability of the student to access social media. The older student is more apt and capable of using social media and may have more of an interest in the social media site. Social interaction is more important to students at this developmental level. Social media implementation allows the 9-12 grade students to learn within a social setting through observation of one’s peers. Although the results of the current study haven’t shown that students are “learning” within this social context, it can be inferred from educational research that students learn within a social setting and thus it is important to provide these opportunities for students. Therefore, the educators who participated in the current study may be implementing social media into course curriculum to give students the opportunity to not only strengthen social connections but also increase the learning experience.

Research Question 4 (a-c)

Research questions 4a-c sought to determine if there was a difference in age of educator and implementation of social media (Facebook, Twitter and YouTube) between various grade levels. The results of RQ4a and RQ4b indicated that there are slightly more 38-47 year old educators that implement Facebook and Twitter in course curriculum over the other various age groups. However, the percentage separating the 38-47 year olds with the 28-37 year olds was only 0.5%. The results of RQ4c revealed that there are significantly more 28-37 year olds that implement YouTube in course curriculum over the other age groups. These results may be due in part to the popularity of social media use among this age group. Previous research by the Pew Internet and American Life Project (Purchell, Heaps, Buchanan, & Freidrich, 2013) found that 73% of people age 30-49 frequent social networking sites, such as Facebook and Twitter.
The results of RQ4a-b demonstrated that there are more 38-47 year olds using Facebook and Twitter in the classroom. It is presumed that educators that fall within this age range have been teaching for a number of years and may be more comfortable with implementing new technologies like Facebook, Twitter and YouTube into course curriculum. However, results of the current study directly contradict previous research that suggests teachers under the age of 35 are more likely than older teachers to label themselves as being “very confident” when using new Internet technologies, such as social media (Purchell et al., 2013). The Pew Internet report (Purchell et al., 2013) also found that teachers under the age of 35 are more likely to have students participate in online discussions and have students share their work on websites, wikis, or blogs, which contradicts the findings of this study. Although the difference between implementation of social media use by 38-47 and 28-37 year olds remains small (0.5% difference), the findings of the current study show that teachers over the age of 38 are the most frequent users of Facebook and Twitter in the classroom.

The results of RQ4c demonstrated that there are more educators that fall within the 28-37 year old age range that implement YouTube into course curriculum, which corresponds with previous research conducted on social media use among this demographic. Based on research of social media statistics, it can be inferred that many educators within the 28-37 year old age group are accustomed to using technology and social media on a daily basis, and have utilized technology and the Internet in their own academic studies and careers (Rainie et al., 2012). In addition, the results of the current study are consistent with Duffy’s (2008) research that found educators are increasingly using YouTube as an instructional tool in the classroom and may be appealing to educators because of its interactive and user-friendly nature.
Research Question 5 (a-c)

Research questions 5a-c sought to determine if there was a difference in educators’ use of social media (Facebook, Twitter and YouTube) in the classroom and student engagement. The results demonstrated that the small number of educators that are using Facebook, Twitter and YouTube in course curriculum, notice an increase in student engagement when these social media sites are being used. These results align with past research that found that students who use social media in the classroom are more engaged and receptive to course material (Zhao & Kuh, 2004).

Although the number of educators using Facebook and Twitter in the K-12 classroom remains small, the current study’s findings correspond with prior research which has found there to be a relationship between social media use and student engagement. In studies conducted at the post-secondary level it was determined that Facebook and Twitter can be used as academic tools to engage and motivate students (Selywn, 2009; Junco et al., 2010; Junco, 2011a). While the current study did not assess if using social media increased academic performance, the results align with Zhao and Kuh’s (2004) research in that the implementation of social media in the classroom appears to lead to more student engagement.

The results of this study are also in line with Selwyn’s (2009) research that found students to be engaged when utilizing social media technologies for academic purposes. The results of the current study found that educators notice an increase in student engagement when using YouTube in course curriculum. This aligns with Duffy’s (2008) research that found YouTube is being used as an educational tool to engage students in course curriculum. Because today’s
students absorb information in images and video, students are more likely to be engaged when using YouTube in the classroom (Duffy, 2008).

The social interaction between students is an important aspect of social media use. Although, the current study did not directly assess whether students were developing social skills and relationships in their learning communities when using social media, it can be inferred that students were interacting with their peers through the use of social media technologies. Because social media is fundamentally social and allows students to interact with others, the results of this study may be compared to Bandura (1977) and Vygotsky’s (1978) studies on social learning. In their theories on social learning, Bandura and Vygotsky established that children learn from their interactions with others in a social environment. It can be inferred that the interactions among students in the social environment allow and provide for student engagement. Baird and Fisher (2005) found that students are actively participating in the learning process when using social media. Because social media provides for a learner-centered, collaborative learning experience, educators may tend to notice an increase in student engagement when students use these technologies in the classroom.

Hypothesis 1 (a-c)

The results of H1a-c found that educators who lack access to social media on their school’s campus used these sites less than educators with access to social media on their school’s campus. These results are consistent with research that has been conducted on social media use in K-12 education that found many educators have limited or no access to social media sites on their school’s campus (Davis, 2010, 2011; Schachter, 2011). Many educators lack access to these sites because school and district administrations are concerned about misconduct
occurring on social media sites. Research has found that safety concerns remain at
the forefront of technology and Internet usage in the K-12 education system
(Davis, 2010, 2011; Schachter, 2011). Davis (2010) discovered that educators
lack access to both Facebook and Twitter as a consequence of these sites being
blocked at many schools due to security reasons and the possibility for
inappropriate behavior and cyber bullying. Also, research has found that federal
laws make it difficult for many school districts (especially at the K-8 level) to
implement social media technologies. This might help to account for the
considerably small number of educators in this study that are using Facebook and
Twitter in the classroom. Thus, although many educators might be using social
media to gather information to use in the academic process, many are experiencing
difficulties in implementing these technologies within the classroom. Likewise,
educators that may want to use social media in the classroom face many obstacles
when trying to implement these sites and will often abandon their use for more
traditional instructional methods and technology. Although the current study did
not assess inhibitors of social media use, these are obstacles that may lend to the
lack of social media use in some K-12 classrooms.

The results of the current study found that educators use YouTube more
than Facebook and Twitter in course curriculum. One possible reason educators
are using YouTube more than other social media sites may be due to the
educational features included in YouTube. Specifically, YouTube EDU has a
“school-appropriate” function that allows teachers and administrators to watch any
video. Because YouTube is catering to educators through YouTube EDU, by
including a wealth of educational information, such as videos across all
disciplines, academic lectures, and lessons from across the world, this site may be
more suitable for classroom implementation.
Hypothesis 2 (a-c)

Hypotheses 2a-c hypothesized that educators who use social media (Facebook, Twitter, and YouTube) for personal use would see more of an educational value in social media. The results of H2a and H2c found that educators that use Facebook and YouTube for personal use did see more of an educational value in social media. However, the results of H2b found that educators that use Twitter for personal use actually saw less of an educational value in social media, as compared to educators who do not use Twitter for personal use.

The results of H2a and H2c are consistent with An and Reigeluth (2011) who found that K-12 teachers exhibit positive attitudes about the use of technology in the educational process. Educators understand that integration of technology in the classroom is important to engage students in learning. An and Reigeluth determined that educators who use learner-centered technology in the classroom “provide students with authentic learning experiences that help students develop real-world skills, such as communication, collaboration, critical-thinking, creative-thinking, problem-solving, and decision-making skills” (p. 2). In addition, a 2010 survey on social media use in education found that 61% of teachers and administrators use at least one social media site for personal reasons (Ferriter, 2010), which aligns with the findings of this particular study. Educators are increasingly using social media, such as Facebook and YouTube in their own lives and thus recognize the educational value in these sites.

The results of H2b demonstrated that educators that use Twitter for personal use actually see less of an educational value in social media. It can be inferred that an educator who uses Twitter personally would be more apt to recognize the educational value in social media; however, the results of this study
indicate that this is not the case. These findings may be due in part to the functionality of this particular social media tool. Specifically, previous research has found that the restrictions to 140 or less characters within a Tweet may be too limiting for some users (Rankin, 2009). Because educators who personally use Twitter understand that the site can be limiting, they might be more reluctant to see the educational value in social media.

It is interesting to note that educators who reported to not use Twitter for personal use reported a higher educational value in social media than educators that do use Twitter. This finding might align with the fact that although there is a growing amount of research on Twitter usage in education, there is an overall lack of studies on K-12 educators’ implementation of Twitter into course curriculum (Grosseck & Holotescu, 2008; Junco et al., 2010). In addition, the current research has demonstrated that while educators recognize the educational value that Twitter can provide, they are not the ones that are personally using this technology. If they are not personally using Twitter, then they may not fully understand how Twitter functions and whether or not Twitter has educational value.

Summary

The results of the study indicate that although many of today’s educators are personally using social media sites and recognize the educational value of social media, the majority of educators remain hesitant about implementing social media technologies in the classroom. Overall, the current study found that YouTube is the most used social media site as compared to Facebook and Twitter. Some reasons for these results may be due to educators’ lack of access to Facebook and Twitter while on the school campus and the safety concerns that
arise due to use of these sites. Many school sites have blocked social media technologies, especially Facebook and Twitter, which make it difficult to implement and use social media in the classroom. Research suggests that educators may feel more comfortable implementing YouTube in the classroom and see a greater benefit in using YouTube for educational purposes. Research has found that videos can be used as an educational tool to motivate and engage students. The educators that are using social media technologies in the classroom tend to be in the age range of 28-49 years old. The study also found that the majority of educators using social media technologies in the classroom are at the secondary (9-12) grade level which can help to benefit high school students. Those educators that are implementing social media technologies in the high school classroom notice an increase in student engagement when utilizing these learner-centered, interactive technology sites.

**Strengths & Weaknesses**

As with any research, there were both strengths and weaknesses with the current research study. There were two main strengths with the current study: 1) a broad distribution of data and 2) a diverse sample. First, the current study was able to gain a strong distribution of data across various schools and districts. The study began with the distribution of the survey to three high schools in the Tulare Joint Union High School District, located in Tulare, California and eventually spread to encompass K-12 schools in the larger California Central Valley region, the state of California, and across the country (even a few out of the country). Next, the study utilized a relatively strong and diverse sample. The study used data from 400 educators of various ages and years of teaching. The study also utilized data from educators at various grade levels in the K-12 educational system. Because of the
large and diverse sample, the external validity is strengthened and allows the results to be generalized to a larger population of educators.

In addition, a major strength of this study is that it adds to the literature on social media use in K-12 education from the educators’ perspective. The majority of prior studies looked at in this research focused on student use of social media, particularly at the higher education levels. Many studies that looked at K-12 education discuss the potential for learning with social media; yet ignore how it is actually being used in the classroom. This study is one of the few that assess if and how K-12 educators are using and implementing social media in course instruction and curriculum. Although this study had numerous strengths, it also had some weaknesses that must be addressed.

The first limitation of this study is that some of the survey questions were overly broad and could have been a little more specific. For example, questions could have addressed exactly how educators use social media when implementing these sites in course curriculum, as opposed to if educators are using social media in course curriculum. The questions concerning whether or not educators use social media to relay information or receive information proved to be vague and provided for difficulties when analyzing results of the study. Although the current study asked if educators are using YouTube to ‘collect’ information for the classroom, the study did not ask if YouTube videos were actually being used in the classroom. If educators are showing students videos (the ‘collection’ of information) via implementation in the class lesson, then they are essentially using the video to relay information to students. The vagueness of these questions may have led to respondents’ answers being inconsistent and reflected ambiguity in the phrasing of the questions which could have weakened the reliability of the answers.
In addition, it would have been useful for the study to know if educators are having students personally use social media in the classroom and how this is being done. It would also be helpful to understand the level of access to technology at each educator’s school site. In this case, access would be related to available technology per student. For example, do schools/districts provide for one computer per student and do students always have access to a computer or mobile technology device (i.e., iPads or Tablets) in the classroom or while on campus? At some schools there may be a lack of actual technology (i.e. computers, laptops, iPads), making it difficult to implement social media into course curriculum. It would be interesting to look at socio-economic information in order to better determine which schools have access to social media technologies and which schools do not. The survey could have also included questions related to social media usage and academic performance. Questions could have addressed students’ individual course grades or GPA’s to determine if social media implementation is leading to an increase in student achievement and academic performance.

Another limitation of this study was in the distribution of the survey link. Specifically, posting the link on the researcher’s personal Facebook page and Twitter feed could have led to skewed results and a weakened external validity. Specifically, it is difficult to know whether every person that answered the survey questions were in fact educators; and therefore, the results of this study cannot accurately be generalized to the greater population of educators. To address this, the survey should have included a question that asked whether respondents were teachers or administrators in order to be able to eliminate non-educators from the data. The fact that the study utilized a combination of several non-random sampling methods—quota, known groups and snowball sampling—also weakened
the external validity and the ability to generalize the results due to the fact that not everyone gets a chance of participating. Therefore, the results of this study may not truly reflect all of the K-12 population. A further limitation was the fact that a number of various questions were left unanswered by some respondents, which could have also led to skewed data results.

Suggestions for Future Research

Although this study has expanded the research on social media use in the classroom, much more research needs to be conducted. As stated in the beginning of this study, there is a general lack of research on social media use in K-12 education. In addition, there is also a lack of research that has examined social media use in the classroom from the students’ perspective. Future research should continue to examine the role that social media plays in the classroom for both teachers and students alike. Specifically, future research should examine the impact social media has on student collaboration and social interaction within the learning environment. Moreover, because academic performance can be a powerful way to measure if student-learning outcomes are being met, it would be beneficial for future studies to examine student grades, test scores, and GPAs when social media is being used in course curriculum.

Although the current study found that many educators lacked access to specific social media sites on the school campus (i.e. Facebook and Twitter), it would be interesting for future studies to explore the reasons for the limited access to these sites. Moreover, it would beneficial for future research to explore the correlation between limited use and availability of technology on campus.

Another suggestion for future research would be to look at the use of mobile devices in relation to social media use in the educational process. Mobile
applications have been developed for Facebook, Twitter and YouTube, which allow users to easily access these websites from their mobile phones or tablets. Although two survey questions in this study assessed whether or not educators had Facebook, Twitter and YouTube applications on their mobile device, the scope of the study did not provide for a discussion of the data results. Future research could look at the use of social media on mobile devices and how this can contribute to the educational process.

Conclusion

Social media technologies constitute the most popular online activities worldwide and are used by people of all ages. The fact that social media sites like Facebook, Twitter and YouTube are used by upwards of a billion people across the globe indicate that social media is here to stay. The development and adoption of social media technologies have fundamentally changed the way that people communicate and interact with one another. Because teenagers have proven to be among the most frequent users of social media technologies, if used and implemented correctly, social media sites can revolutionize the educational process.

Although social media is abundantly popular and its use is widespread, social media technologies, such as Facebook, Twitter and YouTube are relatively new and just beginning to find their way into the classroom. Social media technologies foster the development of the learning community by encouraging interaction and collaboration among students. The interactive nature of social media allows students to actively participate in the learning process, while promoting student engagement and providing students with the opportunity to utilize technology skills that will help benefit them in 21st century society.
Social media can provide students with opportunities to extend their learning and to further develop the skills that will help them succeed both in and out of the classroom. The social and interactive nature of sites like Facebook, Twitter and YouTube, allows students to connect with their peers in the classroom, as well as across the world. It remains the goal of educators to develop students into lifelong learners. The opportunities for lifelong learning can be made possible through the implementation and use of social media in the educational process.
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APPENDIX: SURVEY
We are interested in learning more about social media usage in education. In order to understand more about these areas, we are asking you to participate in a small research study. The survey will take approximately three to five minutes to complete.

Your participation is voluntary. You are free at any time during the study to stop participating. Completing this questionnaire will be your consent to participate in this study.

Please do not put your name or any other identifying item on the survey. You will never be asked to identify yourself and therefore no one can identify you with your answers. With this in mind, please be truthful with all of your answers.

This study is being conducted by Sara Zakarian as part of a master’s thesis at California State University, Fresno, CA 93740. This research is in compliance with Institutional Review Board.

Thank you for your assistance on this research.

1. What is your sex? ____ Male   ____ Female

2. Where do you currently reside?
   ____ Central California   ____ Los Angeles   ____ San Francisco/Bay Area
   ____ Orange County      ____ San Diego      ____ Sacramento
   ____ Inland Empire      ____ Central Coast  ____ Other Southern California
   ____ Other Northern California
   ____ Other (please specify)____________________________

3. What is your age?
   ____ 68+

4. How many years have you been teaching?
   ____ 1-3   ____ 4-8   ____ 7-9   ____ 10-12  ____ 13-15
   ____ 16+

5. What grade level do you teach?
   ____ K-5   ____ 6-8   ____ 9-12

6. Which of the following social media sites are you a registered user? (check all that apply)
   ____ Facebook   ____ Twitter   ____ YouTube

7. Which of the following social media sites do you use on a regular basis? (check all that apply)
   ____ Facebook   ____ Twitter   ____ YouTube
8. How often do you use Facebook?
   ____ Multiple times a day  ____ Once a day  ____ Multiple times a week
   ____ Once a Week  ____ Less than once a week  ____ Never

9. How often do you use Twitter?
   ____ Multiple times a day  ____ Once a day  ____ Multiple times a week
   ____ Once a Week  ____ Less than once a week  ____ Never

10. How often do you use YouTube?
    ____ Multiple times a day  ____ Once a day  ____ Multiple times a week
    ____ Once a Week  ____ Less than once a week  ____ Never

11. Which of the following do you have mobile applications (apps) for on your phone? (check all that apply)
    ____ Facebook  ____ Twitter  ____ YouTube  ____ None

12. Do you utilize these sites more on your mobile device on a laptop/desktop computer?
    ____ Mobile device  ____ Laptop/desktop computer
    ____ Use social media sites equally on mobile device and computer

13. From which, if any, social media sites do you receive information that you use in classroom lectures, assignments, and/or classroom activities? (check all that apply)
    ____ Facebook  ____ Twitter  ____ YouTube  ____ None

14. Do you utilize any of these social media sites for relaying information to students? (check all that apply)
    ____ Facebook  ____ Twitter  ____ YouTube
    ____ None

15. How much access do you have to social media sites (Facebook, Twitter, YouTube) inside the school’s walls?
    ____ Full access  ____ Moderate access  ____ Some access
    ____ No access

16. Do you have access to Facebook on your school’s campus?
    ____ Yes  ____ No

17. Do you have access to Twitter on your school’s campus?
    ____ Yes  ____ No

18. Do you have access to YouTube on your school’s campus?
    ____ Yes  ____ No

19. Do you think that access to social media determines how much you use these sites for class lectures, assignments, and activities?
    ____ Yes  ____ No

20. If you had more access to these sites, would you utilize them more frequently in class lectures, assignments, and activities?
    ____ Yes  ____ No
21. Do you see an educational value in social media?
   _____ Yes  _____ No
22. Do you currently implement or utilize Facebook in course curriculum?
   _____ Yes  _____ No
23. Do you currently implement or utilize Twitter in course curriculum?
   _____ Yes  _____ No
24. Do you currently implement or utilize YouTube in course curriculum?
   _____ Yes  _____ No
25. Do you notice an increase in student engagement when using social media sites in the classroom?
   _____ Yes  _____ No  _____ N/A (don't use)
Open-ended question
26. In what direction do you believe education is heading?
27. Do you see the future educational system being transformed to primarily consist of online learning?
28. Do you see any value in social media being implemented into course curriculum?
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