A Needs Analysis For Social Media At A Southern Postsecondary Campus

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Social media, digital tools that allow immediate interaction such as Facebook and LinkedIn, are popular tools in today's society. This research provides some examination of the use of social media on one southern postsecondary campus. The study included a mixed methodology of qualitative and quantitative research to determine to what extent, and for what purpose, social media are used at this particular campus. A survey was used to determine how social media are used as a tool in the classroom. Follow-up face-to-face and audio interviews were conducted with educators at the postsecondary campus to clarify their reasons for using and not using social media. By examining the reasons educators do and do not use social media in the classroom, strategies were developed to improve school policy practices and instructional support at this southern postsecondary campus. After analyzing the data, recommendations were created to suggest professional development strategies and resources to inform educators and administrators of the southern campus regarding successfully use of social media in the classroom.

Key words: *social media, postsecondary education, needs analysis, professional development, and instructional support*

Introduction and Background

The concept of social media is prevalent in society, but few people know exactly what the term means. As a relatively new buzz phrase in business and society, social media can have different meanings for different groups of people. One common understanding of social media is a platform used for social networking that provides individuals with newer, more innovative ways to communicate and connect socially. People have started looking for ways to capitalize on social media as emerging modes of communication and enhanced ways to connect with others to further their strategic goals. This is especially true in educational institutions, where recent research has indicated educators are using the most popular social media websites as business tools to network with others. For example, aside from using Facebook, the world's most popular social media website, for simple social networking, it is also being used for advertising and recruiting at several universities (Johnson & Maddox, 2012). In addition, the current generation of students entering universities and colleges use Web 2.0 applications such wikis, blogs, Rich Site Summary (RSS), podcasting, and social networking in their daily lives (Lenhart & Madden, 2005, 2007). Social media is penetrating many aspects of human life, and its benefits in educational settings are still not fully known. As new technologies evolve in the classroom, so does the ability of professional educators to push the evolution of educational technologies.

The topic of research developed when a social media policy was announced at the Tennessee campus studied. The policy outlined the expectations for employees, and explained and identified social media as a powerful communication tool that can have a significant impact on the school's reputation. The focus of the policy was ensuring employees' participation was personal or on behalf of the campus. To clarify how best to enhance and protect personal and professional reputations, the policy included guidelines for employees who participate in social media platforms such as Internet messages board, personal web logs (blogs), online journals, wikis, social networks, social media and virtual worlds, or any other form of online communication. The policy was established to help employees appreciate social media and represent the campus professionally. The researcher and two colleagues were discussing the social media policy at the campus in Tennessee and one of the colleagues was not certain which social media methods were used at the campus or the actual meaning of the term *social media*.

More faculty, instructors, instructional designers, and staff are beginning to explore how social media technologies can successfully enhance student learning and encourage digital literacy among college students (Bennett, Bishop, Dalgarno, Waycott, & Kennedy, 2012). Despite the popularity of social media, a low percentage of students and instructors use social media for educational purposes (Chen & Bryer, 2012). College students and instructors are increasingly using online social networks for different reasons (Mazer, Murphy, & Simonds, 2009). The focus of this research was exploring social media usage among higher education faculty.

According to the Tennessee campus studied, social media refers to technologies used for communication development and knowledge sharing. Social media refers to online platforms that people use to share opinions and experiences, including photos, videos, music, insights, and perceptions (Lai & Turban, 2008). The use of social media in the general field of education has been approached with some caution. The use of technology in education is an increasingly popular trend among teaching professionals through platforms such as e-learning. Many educators have not yet harnessed the potential opportunities of using social media in the classroom (Lewis, Pea, & Rosen, 2010).

Statement of the Problem

Based on the rapid increase in the use of social media, some leaders in higher education institutions have adopted policies for using social media to connect with students (Martínez-Alemán & Wartman, 2008). The research problem addressed in this study was the lack of knowledge regarding the use of social media among faculty and administrators in an institution of higher education. The study involved exploring to what extent, and for what purpose, faculty and administrators at a southern postsecondary campus use social media. By examining the extent to which administrators and faculty use social media, the researcher suggests uses for social media on the campus that are more effective.

Purpose of the Study

The purpose of this study was to perform a needs analysis for the campus in Tennessee to harness the knowledge-sharing potential of social media. A needs analysis involves identifying and evaluating needs in a community or other defined population of people (Witkin & Altschuld, 1995). Identifying needs is a process of describing problems or a target population and possible solutions to these problems. A need is a gap between "'what is' and 'what should be'" (Witkin & Altschuld, 1995, p. 12). This study may provide knowledge and educational awareness to people who are not using social media and those who do not know what it is. The strategies developed from this study were designed to implement best practices for improving technology in the educational environment at one postsecondary campus in Tennessee.

Definition of Terms

This research focused on use of social media among faculty and administrators. A brief overview of theconcepts of this research study are as follows:

Policies

Lenartz (2012) noted that policies are standards set by institutional leaders that users are expected to follow. Policies often require approval according to a set process, can have a legal status, and can result in serious consequences if not followed.

Social Media

Joosten, Pasquini, and Harness (2013) argued that social media is a classification for a wide variety of popular technologies that are open, facilitate interactivity, and encourage connectivity.

Social Networking

Boyd & Ellison (2008) reported that social networking refers to web-based services through which individuals to can create a profile and share a connection with others.

Web 2.0 Applications

Anderson (2007) noted that Web 2.0 applications are social networking, blogs, wikis, and any other dynamic, Internet-based applications that allow for ongoing, collaborative, and investigative digital experiences.

Assumptions and Limitations

Assumptions for this study included the participant's involvement. Participation in the survey and interviews was voluntatary and confidential. Participants could withdraw from the process at any time.

One limitation of this study was that only a small sample of college instructors and administrators were surveyed and interviewed; thus, the results are not generalizable beyond the institution studied. The unique characteristics and culture of this institution may result in the levels of use and established guidelines being different from other nonprofit universities. The researcher had no immediate expectations or knowledge of how the college instructors and administrators perceived the impact of social media in higher education. An additional limitation was that the researcher works at the campus where the research took place, which could have influenced participants' descriptions of their use of social media.

Literature Review

This literature review includes an examination of the understanding of social media and its concepts and application. Rogers's Diffusion of Innovation theory is the most appropriate theory for investigating the adoption of technology in higher education and educational environments (Medlin, 2001; Parisot, 1995). Social media is one of the most prominent innovations and incorporates millions of users around the world. Thus, Rogers's Diffusion of Innovation theory was used to explain the adoption of Social Media within the educational environment at one postsecondary campus in Tennessee.

Defining Social Media

Social media is a classification for a wide variety of popular technologies that are open, facilitate interactivity, and encourage connectivity (Joosten et al., 2013). Social media applications are gaining in popularity, as they become a method in which students, staff, and faculty communicate and share information. As social media technologies become more enmeshed in people's lives, there is an expectation that students will develop digital literacy, including skills related to continuous discovery, along with the ability to connect to real-world issues and take responsibility for their own learning (Danciu & Grosseck, 2011). The same can be said of higher education staff and faculty.

Several definitions exist for the term social media. Manovich (2009) described the shift "from media to social media" (p. 320) as the result of spurring technologies and practices that allow ordinary Internet users, rather than media professionals, to engage actively in organizing, discussing, remixing, and creating content. The term social media refers to electronic communication such as websites for social networking and blogging through which users create online communities to share information, ideas, personal messages, and other content such as videos.

Social media can take many different forms, including blogs, forums, message boards, wikis, podcasts, social bookmarking, picture sharing, and instant messaging. Popular social media sites include YouTube,

Flickr, Facebook, and Twitter (Pikalek, 2010). Through social media, students, faculty, scholars, and the public can communicate and collaborate in ways that transcend institutional boundaries. In a study of social media sites popular among scholars, the most frequently used sites for scholarly work were electronic mailing lists, nonacademic social networks, blogs, online document management, media repositories, and wikis (Coleman, 2013).

Who Uses Social Media

Social media provides a learning atmosphere for both faculty and students as they become engaged in higher education. Engagement includes commitment, action, connectedness, and personal interaction and does not require a geographic neighborhood of peers; with the support of social media, staff and educators in higher education can satisfy the expectation of students (Tinto, 2005).Social media increases engagement and supports students from a distance. College students, who include baby boomers, Generation Xers, and millennials, are exposed to all types of technologies in many aspects of their lives (Browning, Gerlich, & Westermann, 2011). Social media provides a dynamic blend of technology and social integration as well as accessibility to individuals of all educational statuses and socioeconomic backgrounds (Ratliff, 2011). Professors at higher education institutions are becoming increasingly likely to use social media platforms as classroom tools (Riley, 2013). Seaman and Tinti-Kane (2013) found that 41% of the faculty they surveyed used social media as a teaching tool in 2013, compared to around 34% in 2012. Despite the growth of social media for personal use, educators have been slow to use social media technologies for academic practice. The authors of the Faculty Survey of Student Engagement (2010) surveyed 4,600 faculty members from 50 U.S. colleges and universities and discovered that 80% of the faculty had never used social media technologies such as blogs, wikis, Google Docs, videoconferencing, video games, or virtual worlds (Guy, 2012).

Trends of Social Media

Cardona-Divale (2012) completed a qualitative descriptive study to determine the extent to which Facebook and Twitter had been implemented and used in the online learning environment. Cardona-Divale discussed the ways social networking sites are transforming education and are providing new learning opportunities when integrated with Web 2.0 tools. Findings revealed that the use of Facebook and Twitter for academic purposes was minimal, and faculty agreed that having these tools, as an option, could be more beneficial than not using current technological tools and services at all. Dey (2013) noted the effectiveness of social media in advancing transformational change. Successful implementation of new practices can effect transformational change in an organization that is heavily dependent on the support of key stakeholders. Dey's results showed a clear preference for using social media as an effective form of relationship development and effective communication, but a challenge remains regarding how organizational leaders can best use social media to create and sustain the relationship required to accomplish transformational change.

Use of Social Media in Universities and Colleges

Higher education instructors are having a hard time accepting that social media dominates the world, at least outside of the classroom (Kadel, 2013). Seaman and Tinti-Kane (2013) discovered that 41% of faculty surveyed used social media as a teaching tool in 2013, compared to around 34% in 2012.More than half of higher education faculty replied that they used social media platforms for professional purposes in 2013.The number of faculty who used social media in the classroom still did not represent a majority, but teaching use continued a steady annual growth. Faculty see considerable potential in the application of social media and technology in their teaching, but not without a number of serious barriers. Social technologies can provide new opportunities to engage learners, and many educators are

discovering impactful strategies for using them in face-to-face, blended, and online classes (Seaman & Tinti-Kane, 2013).

Rogers's Diffusion of Innovation Theory

The five-step process. Rogers (2003) suggested that individuals follow a five-step process when deciding to adopt an innovation. The first step is knowledge, which occurs when a person first learns about an innovation. The second step is persuasion and occurs when the person adopting the innovation forms a favorable attitude about it. The third step is decision and occurs when the person chooses to adopt the innovation. The fourth step is implementation and occurs when theperson actively begins using the innovation. The last step is confirmation and occurs when the person adopting gains positive reinforcement from the adoption process.

***Diffusion of Innovation and Social Media*.** Social media is an innovation and a new technology to the postsecondary institution in Tennessee. Innovation is an idea, practice, or object perceived as new by an individual or other unit of adoption (Rogers, 2003). According to human behavior, it does not matter whether an idea is objectively new, as measured by the lapse of time since its first use or discovery (Rogers, 2003). Rogers's Diffusion of Innovation theory is the most appropriate theory for investigating the adoption of technology in higher education and educational environments (Medlin, 2001; Parisot, 1995). Social media is one of the most prominent innovations and incorporates millions of users around the world. Rogers (2003) suggested that individuals follow a five-step process when deciding to adopt an innovation. The first step is knowledge, which occurs when a person first learns about an innovation. The second step is persuasion and occurs when the person adopting the innovation forms a favorable attitude about it. The third step is decision and occurs when the person chooses to adopt the innovation. The fourth step is implementation and occurs when the person actively begins using the innovation. The last step is confirmation and occurs when the person adopting gains positive reinforcement from the adoption process.

To integrate technology into higher education successfully, it is important to gather perceptions of technology from the faculty who will use these resources. Vanguri, Gomes, and Gray (2007) conducted a study to investigate faculty technology use at institutions of higher education in Florida by examining various types of instructional technology beliefs and practices. One of the major areas to address with technology integration in higher education was faculty development. Vanguri et al (2007) chose a qualitative, ethnographic approach to the study, which included a survey of faculty at the institutions to investigate their perception of faculty development programs at their institutions. The study also investigated the various ways that the institutional leaders made their support systems and programs known through official publications and websites. One important factor discovered in the resistance of technology was the dynamics of the relationship between faculty and support staff in the university environment. Most faculty members at the institutions of higher education had years of teaching experience and were experts in their content area, but few faculty members received formal teaching training.

Methodology

Research Design

The most appropriate method for this study was a needs analysis because the purpose of a needs anlysis is to define the gap between current and desired organizational and individual performances. (McArdle, 1998). A needs analysis is usually the first in a series of steps implemented to encourage effective change. The research was designed to study the use of social media among faculty and administrators in an institution of higher education. The research question was as follows:

To what extent, and for what purpose, is social media being used by faculty and administrators at a postsecondary campus?

This study includeda quantitative and qualitative research approach. The study includedtwo different collection tools: an electronic survey and an interview protocol with open-ended questions. According to Leedy and Ormrod (2009), researchers use a survey to acquire information by asking questions and tabulating the responses, which is appropriate for descriptive data analysis. Fifteen open-ended questions allowed the respondents to give their perception of social media use personally and in the classroom. An open-ended question, unlike a leading question, establishes a topic to explore while allowing participants to take any direction they want; it does not presume an answer (Seidman, 2013).

Previous research included the interview protocol by Chen and Bryer (2012) to explore the use of social media. This study used this interview protocol with minor modifications. The survey provided extensive, descriptive data and further elaborated on information about the interviewee ragarding use of social media. The survey was used to identify factors across all participants.

The data analysis included a thematic analysis of the interview data and factor analysis of the survey data. Recurring themes and patterns were revealed during the thematic analysis. Areas of major concern included instructional practices with a focus on materials and procedures currently used in the classroom and the interviewees' perceptions of strengths and weaknesses regarding social media. The purpose of a factor analysis is to summarize data so that relationships and patterns can be easily interpreted and understood. It is often used to regroup variables into a limited set of clusters based on shared variance. The basis of factor analysis is the notion measurable and observable variables can be reduced to fewer latent variables that share a common variance and are unobservable, which is known as reducing dimensionality (Bartholomew, Knotts, & Moustaki, 2011).

Sampling Methods and Procedures

This study included a purposive sampling method because the participants for this study were instructors and administrators at a postsecondary campus. The campus has approximately 45 faculty members, 10 administrators, and 400 students. Participants in this study were purposefully selected based on their involvement and experience with the study topic. The snowball sampling technique was also used with the selected participants, who suggested names of other faculty who might meet the inclusion criteria (Veletsianos, 2012).

The electronic survey was sent to all members of the target population with an introductory message inviting them to complete the survey. The survey was used to select 10 instructors and administrators to participate in the interview portion of the study. For the interviews, the study included an even mix of respondents who did and did not use social media in the classroom. The number of participants was adequate for the qualitative study and allowed a deeper analysis. Interviews were conducted both face-to-face and using the software application Free Conferencing, depending on the location and schedule of the interviewee. After sending out the first survey e-mail, a reminder notice was e-mailed every 7 days to respondents who did not return the survey within 2 weeks.

Instrumentation

The study included two different collection tools: an electronic survey and an interview protocol with open-ended questions. The survey consisted of 14 questions, two of which were open-ended. The survey consisted of demographic questions and questions that determined if the interviewees were

comfortable with social media in the workplace or personally. The interview was semistructured and included 12 open-ended questions.

Survey. According to Leedy and Ormrod (2009), researchers use a survey to acquire information by asking questions and tabulating the responses, which is appropriate for descriptive data analysis. The survey used in this study was adopted from a published dissertation on a related topic. The questions were modified so the researcher was able to identify and learn more about the social media preferences participants were using. The detailed survey was developed and available online through Google Forms for at least 4 weeks from the original e-mail date. An e-mail sent to the participants included a link to the survey. The survey helped to determine the effects of a knowledge base on social media use among college instructors and faculty members. The survey included questions about demographics, respondent attitudes, the ways the participants thought and felt, and the ways they used or did not use social media. The researcher designed the survey to gather personal data about the interviewees.

Interview protocol.The researcher received permission in the Fall 2013 from Chen and Bryer (2012) to use their interview protocol with a few modifications. The modifications consisted of asking if the participant knew what the term social media meant and adding additional probing questions. The 15 open-ended questions allowed the respondents to give their perception of social media use personally and in the classroom. An open-ended question, unlike a leading question, establishes a topic to explore while allowing participants to take any direction they want; it does not presume an answer (Seidman, 2013).

Data Collection and Analysis

The following steps were followed sequentially, including the use of an electronic survey composed of 14 questions distributed using Google Forms to learn more about participants' social media preferences and by conducting interviews.The survey was available online for at least 4 weeks from the original e-mail date. A reminder notice was e-mailed to responders every 7 days. After the survey time expired, 12 respondents were chosen for interviews. All respondents signed a consent form that explained the purpose of the study prior to the interview. Each of the 12 respondents was contacted via e-mail and an interview date and time were scheduled. Participants met the interviewer in a designated area or received details for the audio conference-call application FreeConferencing.com. The participants and researcher met at the designated time and location. Upon beginning the interview, the interviewer discussed the interview protocol regarding the purpose of the interview and the fact that the interview would be recorded. Each participant was interviewed once for no longer than 45 minutes. The interviewer used the interview protocol to guide the interviewee through the questions and took field notes regarding the participant's responses to the questions using an audio tape recorder or free conference calling software. Relevant labels such as words, phrases, sentences, or sections were recorded during the interview, and the researcher transcribed the interviews. To strengthen the reliability and validity of the study, a peer doctoral student reviewed the field notes with all the common themes, the analysis without looking at the researcher's analysis to report their findings. The researcher also received assistance from a doctoral colleague who reviewed and confirmed the accuracy of the transcriptions. All collected data were secure, locked, and coded to prevent the survey from being compromised.

Interviews and a survey were the major sources of data for this study. The social media surveyprovided extensive, descriptive data and further elaborated on information about the interviewee. The analysis of the survey involved summarizing the data according to the research question (for example, best

practices and overall impact on students). A factor analysis was used to identify factors since it is commonly used to reduce variables into a smaller set to facilitate easier interpretations.

The researcher analyzed interviews by writing memos or notes that were involved as a narrative in the final report, and organizing the structure of the final report. After all interviews were completed, the researcher reviewed the notes to develop themes. To enhance the rigor of the study, several techniques were used during the data-gathering process. The qualitative software program NVivo was used for organizing, sorting, and searching for information in text. The researcher organized and prepared the data for analysis, which involved transcribing interviews, typing field notes, and cataloging visual material. The data were sorted and arranged into different categories depending on the sources of information. All data was read and reviewed to obtain a general sense of information and to reflect the meaning. A coding process was used to generate a description of the setting or people as well as the category or themes. The interpretation and findings of the results were written in a report based on the data used from the content of the original data sources. Ideas and themes developed from these findings and the process by which these outcomes were researched.

The data analysis process followed each observation and interview, as the researcher reviewed the sources of information to identify recurring themes and patterns. Data and tentative interpretations were developed. Areas of major concern included instructional practices with a focus on materials and procedures currently used in the classroom and the interviewees' perceptions of strengths and weaknesses regarding social media.

Credibility

The trustworthiness of any qualitative study relies on the triangulation of data (Patton, 2002), the maintenance of data (Yin, 2009), and the interpretation of data. Creswell (2008) observed that the triangulation of data from multiple sources reduces potential bias, provides greater credibility, and enriches the reliability of research findings. Methodology triangulation consistsofcombining multiple methods to gather data, such as documents, interviews, observations, questionnaires, or surveys, when conducting primary research at different times and in different places. This study involved both a survey and interview in order to ensure increased credibility of the data.

Findings

Analysis and Evaluation of Research Data

The data analysis is reported in the following order:

Descriptive Statistics

Table 1 shows the descriptive statistics for the participants. Of the 23 individuals who responded to the survey,16 (69%) were adjunct instructors, four (17.4%) were full-time faculty, and six (26.1%) were administrators (see Table 1). In addition, 9 (39.1%) had 1-5 years of teaching experience, 10 (43.5%) had 6-19 years of teaching experience, and four (17.4%) had more than 20 years of teaching experience. Thirty-nine percent of individuals were between the ages of 31 and 45, 52.2% were in the 46-59 age group, and 8.5% were 60 and above.

Table 1. *Descriptive Statistics*

Position	*n*	%
Adjunct instructor	16	69.6
Full-time faculty	4	17.4
Administrator	6	26.1

Thematic Analysis

After analyzing the transcripts of the 12 interviews, four main themes emerged regarding effective social media use in the southern university: professional development and training, resources and suggestions for use, clarity of the definition of social media, and benefits of using social media in the classroom. Comments were counted to determine frequency between categories (see Table 2).

Table 2. *Themes and Frequencies*

Themes	*n*
Professional development and training	23
Resources and suggestions for use	9
Clarity of definition of social media	19
Benefits of using social media in the classroom	23

Numerous themes emerged from the initial coding efforts, but the main themes were condensed into the four listed. Each primary theme is summarized below.

The importance of developing and implementing training for social media. The professional development and training theme was the most popular theme discussed by a significant margin. Some of the mentions in this category reflected the question about how the respondents could be more effective in using social media, but many focused instead on the need for professional development to make sure they were complying with the social media policy. Others felt the students know why social media is being used and educators should become more involved with the latest technology.

Resources. Interviewees indicated a lack of resources, including not being familiar with the current location of the Center of Learning site currently provided by the university. Many of the respondents felt that the lack of being computer savvy and navigating the internal website for available resources was a challenge they faced in effectively using social media.

Clarity of definition of social media. Unlike the other themes that were fairly consistently reported among the respondents, this theme was more divided between those who believed they had a clear understanding of the social media environment and those who felt they had a good handle on the term. Others felt that their understanding of social media was precisely what they used to motivate the students.

Benefits of social media usage. All interviewees used social media for personal, academic, research, or professional purposes. The most popular services were Facebook and LinkedIn. The majority of them used Facebook for personal communication and LinkedIn for professional connections. Some other services mentioned in the interviews included course management systems (e.g., Blackboard), blog services (e.g., Blogger.com), wiki services (e.g., PBS Works), and Weebly (e.g., a blogging application or website); YouTube was the most frequently used for teaching and networking with the students.

Fourteen (66.7%) instructors used the learning platform in their daily classroom, eight (38%) educators used Facebook, five (23.8%) used Twitter, 14 (66.7%) used YouTube in their classroom, and10 (47.65%) used other types of social media such as LinkedIn, Google+, Pinterest, and Edmodo (see Table 3). Although the respondents mostly suggested that social media could have a positive impact on the higher education environment, some preferred that social media be constrained to limited operational functions such as YouTube and LinkedIn for networking purposes.

Table 3. *Types of Social Media Used in the Classroom*

Social media	*n*	%
Facebook	8	38.1
Twitter	5	23.8
YouTube	14	66.7
Other, please specify_____	1	4.8
Other	10	47.6

Survey Findings

Results from the survey instrument were collected and analyzed using an exploratory factor analysis. To determine whether the survey data had sufficient multicollinearity to run a factor analysis, Bartlett's test of sphericity was conducted. Bartlett's test of sphericity of the data had a x^2= 187.864 (p < .001), which means that correlations in the data set were appropriate for factor analysis. The Kaiser-Meyer-Olkin measure of sampling adequacy was .447, which was not above the .5 recommended limits (Kaiser, 1974).The sample size was the main problem, but due to the small size of the college, the researcher was unable to obtain the suggested 100 participants for the test; therefore, the researcher proceeded with an exploratory factor analysis, which helped to reduce the data to a smaller set of variables that was easier to complete. As the sample size was small, there may be interaction between variables.

Defining Factors An exploratory factor analysis was performed on the data obtained from the survey instrument. Five factors were extracted and accounted for 78.535% of the variability (see Table 4).

Professional development. This first factoraccounted for 30.78% of the variance. It contained five items from a category of training. The participants responded to training professional usage (average of 1.45 out of a possible 5 points) with responses 1=*strongly agree*, 2=*agree*, 3=*neutral*, 4=*disagree*,and 5=*strongly disagree*; professional use (average of 2.52 out of a possible 3 points) with responses 1=*never*, 2=*infrequently*, and 3=*frequently*;and barriers (average of 2.94 out of a possible 4 points) with responses 1=*content relevant*, 2=*ethical issues*, 3=*technology*, and 4=*other*. The highest rated factor for professional development was barriers (average of 2.94 out of a possible 4 points). The last in this factor was connection (average of 1.59 out of a possible 5 points) with responses 1=*strongly agree*, 2=*agree*, 3=*neutral*, 4=*disagree*, and 5=*strongly agree.* The highest rated factor for professional development was barriers (average of 2.94 out of a possible 4 points).

Current use: This factor accounted for 17.41% of the variance. The second factor indicated both professional and personal use of social media sites. For professional use, the participants (average of 2.52 out of possible 3 points) responded with 1=*never*, 2=*infrequently*, and 3=*frequently*, and for personal use (average of 2.34 out of possible 3 points) participants responded with 1=*never*, 2= *infrequently*, and 3=*frequently*.

Reason for use: This factor accounted for 13.62% of the variance. It indicated how social media can be beneficial in the classroom, both on campus and online; social media use; and not personally using social

media. The participants indicated how social media can be beneficial in the classroom (average of 1.18 out of possible 4 points) with responses of 1=*yes*, 2=*no*, 3=*not really sure how to utilize this tool*, and 4=*not familiar enough to address this question*. The participants indicated social media use (average of 2.34 out of a possible 3 points) with 1=*never*, 2= *infrequently*, and 3=*frequently*. The participants also indicated reasons they did not use social media (average of 2.00 out of 5 points) with responses of 1=*privacy*, 2=*ethical*, 3=*technical limitations*, 4=*limited usefulness*, and 5=*other.*

About yourself: This factor accounted for 9.42% of the variance and indicated the interviewees' age and years of service. The participants' responses for age (average of 2.69 out of possible 4 points) were 1=*less than 30*, 2=*31-45*, 3=*46-59*, and 4=*60 and above*. The participants' responses for service (average of 1.78 out of 3 points) were 1=*1-5 years*, 2=*6-19 years*, and 3=*20+ years*.

Barriers: This factor accounted for 7.29% of the variance that described how the educators had concerns and were not professionally using social media. The participants' responses for concerns (average 2.94 out of possible 5) were 1=*private concerns*, 2=*ethical*, 3=*technical*, 4=*limited usefulness*, and 5=*other*). The participants responded to concerns with reasons for not professionally using social media (average of 2.75 out of possible 4 points) with 1=*privacy*, 2=*ethical issues*, 3=*technology*, and 4=*limited usefulness*, and 5=*others.* For each variable, the mean was recorded, calculated, and compared. The variables were examined using SPSS.

Table 4: *Factor Analysis Table*

Factors and items	Mean	Category	*N*
Professional development			
Training (n=22)	1.45	1=Strongly agree	n=15
		2=Agree	n=5
		3=Neutral	n=1
		4=Disagree	n=1
		5=Strongly disagree	n=0
Professional use	2.52	1=Never	n=3
(n=23)		2=Infrequently	n=5
		3=Frequently	n-15
Barriers (ethical & technology) (n=17)	2.94	1=Content Relevance	n=3
		2=Ethical issues	n=1
		3=Technology	n=7
		4=Other	n=6
Connection (n=22)	1.59	1=Strongly agree	n=14

		2=Agree	n=5
		3=Neutral	n=1
		4=Disagree	n=2
		5=Strongly disagree	n=0
Current use			
Professionally use social media sites (n=23)	2.52	1=Never	n=3
		2=Infrequently	n=5
		3=Frequently	n-15
Personally use social media sites (n=24)	2.34	1=Never	n=4
		2=Infrequently	n=7
		3=Frequently	n=12
Reasons for use			
Beneficial (n=22)	1.18	1=Yes	n=20
		2=No	n=0
		3=Not real sure how to utilize this tool	n=2
		4=Not familiar enough to address this question	n-0
Social media use (n=24)	2.34	1=Never	n=4
		2=Infrequently	n=7
		3=Frequently	n=12
Not personally using social media (n=14)	2	1=Privacy	n=9
		2=Ethical issues	n=3
		3=Technical Limitations	n=0
		4=Limited usefulness	n=0
		5=Other	n=2
About yourself			
Age (n=22)	2.69	1=Less than 30	n=0

		2=31--45	n=9
		3=46-59	n=11
		4=60 and above	n=2
Service (n=23)	1.78	1=1-5 years	n= 9
		2=6-19 years	n=10
		3=20+ years	n=4
Barriers			
Not professionally using social media (n=16)	2.75	1=Privacy	n=4
		2=Ethical	n=6
		3=Technical limitations	n=1
		4-Limited Usefulness	n=4
		5-Other	n=1
Concerns (n=17)	2.94	1=Privacy	n=3
		2=Ethical	n=1
		3=Technical limitations	n=7
		4-Limited Usefulness	n=6
		5-Other	n=0

Examination of Research Question

The research findings were examined to address the following research question.

Research Question 1: To what extent, and for what purpose, is social media being used by faculty and administrators at a postsecondary campus?

An exploratory factory analysis was performed on the data obtained from the survey instrument. In addition to determining the types of social media being used, five factors were extracted that accounted for 78.54% of the variability. The factors were professional development, current use, reasons for use, about yourself, and barriers. A thematic analysis was also performed. Results from the interviews were grouped according to the types of responses provided. Four themes emerged from participants' responses: professional development, resources, clarity of definition of social media, and benefits of using social media.

Summary and Implications

Summary

The guiding question related to this research study arose from a needs analysis to determine to what extent, if any; social media is being used at a southern postsecondary campus. A mixed methodology was adapted to examine educators and administrative personnel's perceptions of social media. The purpose of educational innovation is presumably to help schools accomplish their goals more effectively by replacing some inadequate programs or practices with ones that are more effective (Fullan, 1982). Results indicated that although some faculty members and administrators currently use social media for educational purposes, most are willing to consider such uses in the future. Most faculty is using social media on a social level, but a few are using it on a professional level. The analysis showed that educators and administrators on the southern campus use social media to disseminate messages to their audience, which may include students, alumni, or the community.

The exploratory factor analysis helped to understand the underlying structure by identifying five factors that accounted for most of the variability in the respondents' ranking. Training and professional development was the most important factor discovered. The most popular theme from the interviews was also professional development and training. Participants expressed that if proper training were provided, then they would use social media professionally.

According to Rogers (2003), the five stages of acceptance in the Diffusion of Innovation theory are knowledge, persuasion, advantage, implementation, and confirmation. The Diffusion of Innovation theory includes the acceptance of an innovation through communication channels in society over a period of time (Rogers, 2003). The theory indicates that specific intrinsic characteristics are associated with the acceptance rate of innovation and include a relative advantage over using the technology. The Diffusion of innovation theory not only helped frame the guiding question, but also underscored the importance of attributes of the innovations, the communication channels involved in diffusion, the decision processes of adopters over time, and the social systems in which adopters live and work (Rogers, 2003).

This study contains some limitations. This study included only college instructors and administrators from one university in Tennessee. Therefore, results were not generalizable beyond that particular institution. The unique characteristics and culture of this institution may have resulted in the levels of use and established guidelines being different from other nonprofit universities. An additional limitation was that the researcher works at the southern university where the research was conducted. The researcher did not have a personal relationship with the individuals participating in this research.

Implications

The key themes that emerged from the data analysis were (a) professional development and training, (b) resources and suggestions for use, (c) clarity of the definition of social media, and (d) benefits of using social media in the classroom. The results showed that the educators knew about specific social media tools, their level of knowledge was low to moderate, and the majority of educators and administrative personnel had a sufficient level of knowledge about social media, which are parallel to results in Moran et al. (2013) and Seaman and Tinti-Kane (2013).

Administrators: Administrators may provide support to educators to coach them on how to use internal resources that are available, as they constantly use the internal website for student support. Administrative personnel can improve the use of social media by incorporating technology into the current usage and by becoming involved with faculty to use the tools. It might be beneficial to include current and best practices for using social media in future professional development workshops.

Resources may include webinar recordings, academic-publication, and multimedia learning modules. Administrators may consider providing systematic instructions on how to use various types of social media tools properly.

Instructors: Based on the literature and findings of this study, the use of social media in higher education is likely to continue to increase, which means that faculty must be prepared to learn how to use social media properly as a daily practice. Expanded exposure to social media can benefit student learning by creating more connections over time. Many educators expressed a need for professional workshops that would contribute to using social media successfully. Educators who take the time to use various forms of social media may expand on student engagement and save time in the classroom. They should then be able to share their knowledge and resources, including some of their tried practices, to those educators who may be unfamiliar with or uncomfortable using social media. Sharing among resources may increase educators' persuasion, decision, and implementation that will allow them to use social media. If faculty is shown how to implement some social media tools properly in their classroom and participate in the professional development workshops, they might feel more comfortable about using such tools in the future.

***Future Research*:** Based on the data collected, it appears that social media is currently being used in higher education and will likely increase in popularity in the future. Future research will be necessary to determine to what extent and for what purpose educators and administrative personnel in other forms of higher education use social media. A question remains regarding how effective educators will become after they are properly trained how to implement social media into their classroom. Future inquiry may include how the usage of social media can enhance student engagement, as well as provide more interaction among educators and students.

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