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SMART SOCIAL NETWORKING: 21st CENTURY TEACHING AND LEARNING SKILLS

Abstract: Education in the 21st century highlights globalization and internationalization. Preservice teachers in the 21st century are technology savvy. To effectively engage and teach generation Z students, preservice teachers will help the educational system meet this requirement. The educational systems must be outfitted with a prerequisite of ICT resources both hardware and software, and curricula must be designed to promote a collaborative learner-centered environment to which students will relate and respond. This study determines the 21st century skills possessed by the pre-service teachers in terms of social networking. Pre-service teachers use computers in very advanced ways, but educators must remember that they still need guidance to use technology safely and effectively. Through social media the pre-service teachers can use a multitude of applications, including Web 2.0, for their projects. Smart social networking requires critical-thinking skills and the ability to integrate and evaluate real-world scenarios and authentic learning skills for validation.

Key words: smart social networking, preservice teachers, 21st century teaching and learning skills, technology savvy.

1.0 Introduction

> *"Today's digital kids think of ICT as something akin to oxygen; they expect it, it's what they breathe and it's how they live."*
>
> *John Seely Brown*

Preservice teachers in the 21st century are technology savvy. The students in the 21st century have grown up in a fast-paced digital world, and easily tune out of the traditional lecture-based classroom. Researching, communicating and even online job application across the world via computer or cell phone is a snap for them. Social networking sites (SNS) are only as good as the content their users share (Burke et al., 2009).

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Liu (2010) mentioned that Web 2.0 technologies are emerging every day in spite the fact that there are already more than enough applications for people to use. YouTube, iTunes, Facebook, Myspace, Instagram, blogging, wikis, Tumbler, and twittering are some Web 2.0 social media technologies emerged in the market. The preservice teachers are using these social media technologies in communication, recreation and education. These applications were not developed for learning purposes (Liu, 2010). Most people use them for recreational purposes such as "gaming, communication, and shaping online spaces for expression of personal identity" (Crook, et al. 2008).21st century teachinginvolves a balance of the objectives of the teacher with the needs and input of the students as disclosed by McCoog (2008). The pre-service teachers stress that Facebook users (students) participate widely in the fields that allow them to present themselves to other users.

To effectively engage and teach generation Z students, preservice teachers will help the educational system meet this requirement. The school systems must be outfitted with a prerequisite of ICT resources, and curricula must be designed to promote a collaborative learner-centered environment to which students will relate and respond. As ICT is integrated into classrooms, preservice teachers must have professional development in utilizing social media in instruction.

The preservice teachers in the Philippines need to be reshaped and be guided in using social media in teaching and learning. With all these, there is a need for the preservice teachers to possess the skills of the 21st century teaching and learning which smart social networking is.This study explores possibility of using social networking technology by the preservice teachers to enhance learning in basic education.

2.0   Short Literature Review

21[st]century learners must possess both self-direction and an ability to collaborate with individuals, groups,and machines (McCoog , 2008). Social networking is built on the idea of how people know should know and interact with each other (Zaidieh, 2012). Social networking enable preservice teachers integrate technology into teaching and learning. In addition, it will capacitate them to be socially aware of the problems of the students. Electronic social-networking services such as MySpace and especially Facebook have rapidly earned fame. Ractham and Firpo (2011) as cited in Zaidieh (2012) stress that the model of the web as a decentralized search engine to search information or communicate with others is becoming obsolete. In addition, he mentioned that the most famous in the world of social networks are Facebook (Facebook.com) and Twitter (Twitter.com) and MySpace (myspace.com) and others.

Education in the 21[st]century highlights globalization and internationalization. Any advancement of technology presents theoretical constructs and realistic insights in the development and enhancement of knowledge, skills, and attitudes among students and teachers (Abao, Dayagbil, & Boholano, 2015). Eijkman (2009) as cited in Abao et al (2015), with social media, educators can now much more readily connect their students not just in their own localities, their places of learning, and to each other, but also to a huge and ever expanding diversity of social, cultural, political networks and therefore to multiple ways of being knowing and communicating. Paquet (2003) as cited in Duffy and Bruns (2006) mentions that blog refers to the term 'blog', initiated by Barger in 1997, as a log of the web — or weblog.

The social network sites focus heavily on building online communities bound to together with common interests or activities (Zaidieh, 2012). Thereby provide preservice with tools that help them to do so. In the field of E-Learning, the social network sites can be used to communicate and discussed topics online. As revealed by Boholano (2013), ICT does not automatically improve teaching and learning, teachers have to do something in order to motivate learners. The improvement of the teaching learning process depends on the strategies used by the teacher. Technology will help teachers facilitate effective teaching.Lombardi (2007) reveals Social networking tools such as del.icio.us, or citation management tools for researchers such as Connotea, can help learners find a broader community willing to share information and references. In Lampe (2007) it is stated that Facebook allows for two types of "friendship" links: with users at the same institution or with users at other institutions (now called "networks"). In the same study, it was stated that the categories "About Me," "Interests," and "Favorites" are the most open fields available to Facebook users, with users able to articulate many preferences that shape the public persona they are trying to present to others

Learners face some difficulty through social networking in expressing their views and ideas in writing, as many learners prefer to express their ideas orally which is approach they have used for many years through their study, while e-education users need to be acquire to writing skills to express their ideas and opinions freely (Zaidieh, 2012). The basic education institutions in the Philippines acknowledge that they must move quickly with the technology driven changes in society and economy (Boholano, 2013). Educators can use Web-based communication tools to help students collaborate with one another, sharing and constructing knowledge (Lombardi, 2007). Bell (2010) cited that children solve real-world problems by designing their own inquiries, planning their learning, organizing their research, and implementing a multitude of learning strategies.

The increasing use of Wiki is mostly for learning resources and collaborative projects and assignments. Berinstein (2009) as cited in Liu (2010) divulge that Wikipedia exemplifies a fascinating new paradigm. It is open to everyone, not only to read, but also to create and maintain, and governed primarily by community consensus. Cheong (2002) as cited in Zaidieh (2012)states that the social networking is easy and quick in term of accessing accessibility, reviewing, updating, and editing learning material needs anytime and anywhere. Microblogging is a Web2.0 technology, and a new form of blogging that let the users publish online brief text updates, usually less then 140-200 characters, sometimes images too (Grosseck & Holotescu, 2008).

The success of social media environments rests on the correct balance of these elements (Burke, Marlow & Lento, 2009). According to Vie (2008) compositionists have attempted to move beyond these instrumental views of technology in examining the digital divide and in doing so have raised important questions about the larger societal issues connected to the issues of technological literacy and access. In line with this, the pre-service teachers used technology in instruction.

McCoog (2008) argue that to acquire 21st century skills, students must be encouraged to create new ideas, evaluate and analyze the material presented, and apply that knowledge to their previous academic experiences. Saha and Mukherjee (2003) cited that project devices are highly optimized to particular tasks so that they blend into the world and require little technical knowledge on the user's part. Universities are losing their grip on higher learning as

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the Internet is, inexorably, becoming the dominant infrastructure for knowledge — both as a container and as a global platform for knowledge exchange between people — and as a new generation of students requires a very different model of higher education (Tapscott & Williams, 2010). Since YouTube's rise to Internet prominence is a fairly recent development, substantive scholarly work into the effects online video streaming can have in an EFL classroom is fairly sparse (Watkins & Wilkins, 2011).

Students say they are motivated by solving real-world problems (Lombardi, 2007). In the same study, technology is also providing access to phenomena that might otherwise remain opaque to many novices, particularly so-called experiential learners. Pre-service teachers must possess the 21st century skills in social networking. Lombardi (2007) discloses that authentic learning can rely on educational software developed to simulate typical scenarios that professionals encounter in real-world settings. Students may use a wiki to share knowledge or blog with other students to troubleshoot during the process segment of their projects (Bell, 2010).Integrating pervasive computing components has severe reliability, quality of service, invisibility, and security implications for pervasive networking (Saha & Mukherjee, 2003).Roberts, Foehr, and Rideout (2005) as cited in Pempek, Yermolayeva and Calvert (2009) mentions that Media use provides an important backdrop for the social, emotional, and cognitive development of youth, accounting for a large portion of their time.

Face to face interaction must be replaced to online activities. Technology trainers are a good option to ease the transition to 21st century teaching (McCoog, 2008). In Williams and Jacod (2004), blog is said to be a writing a blog assists here because it forces a student to confront their own opinions and contemplate how their views might be interpreted and reflected upon by others (Mortensen & Walker, 2002, cited in Lamshed, Berry & Armstrong, 2002; in Williams and Jacob, 2004). Breaden (2008) s cited in McCoog (2008) contends that technology specialist handles researching current trends in education technology, creating professional development opportunities, and supporting teachers in 21st century efforts. It is said that Students have long learned as much from each other as they have from an instructor or a textbook - it's just a question of finding an appropriate vehicle for facilitating this learning (Williams and Jacob, 2004). In the Philippines, many important reforms of teacher education that have been undertaken since 2000 to enhance teaching and learning.

3.0 Methodology

The study utilized qualitative-quantitative method. Survey questionnaires were distributed to 250 preservice teachers but only 207 were retrieved. After the data gathered, it was tabulated and interpreted. Microsoft excel was used to graph the data gathered. Focus group discussion was also done to validate their answers. After the FGD, the researcher also had a random interview with the junior students to make sure that the answers of the pre-service teachers were valid.

4.0 Results and Discussion

The Internet provides numerous venues for pre-service teachers to share their views, preferences, lessons or experiences with others as well as opportunities to teach and learn. Social networking sites provide easy-to-use tools for all users to invite others to join the network. Below is the tabulated data gathered from the pre-service teachers in the College of Teacher Education, Cebu Normal University.
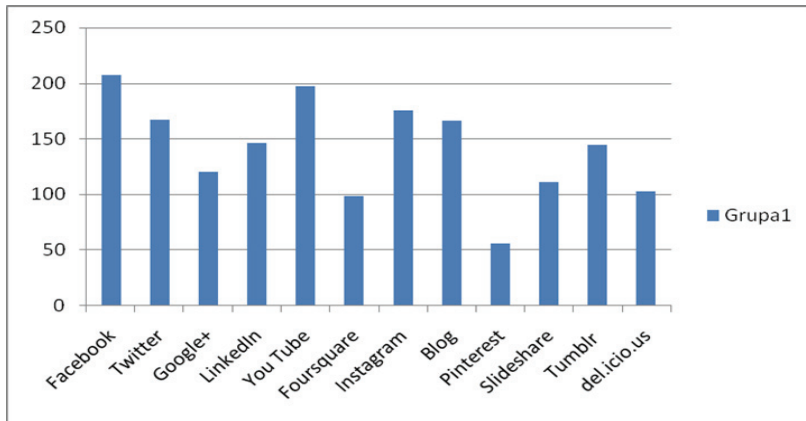
Figure 1: Profile of Social Networking Sites Utilized by Pre-Service Teachers

Facebook is the most commonly used social media sites by the pre-service teachers. A social networking site is typically initiated by a small group of founders who send out invitations to join the site to the members of their own personal networks (Trusov, Bucklin, & Pauwels, 2009).Lenhart et al. (2010) divulge that internet use is near "ubiquitous" among teens and young adults. In the last decade, the young adult internet population has remained the most likely to go online. Facebook is currently the most commonly used online social network among pre-service teachers. Understanding an individual's technological environment is now a vital clue in understanding how that person uses the internet, connects with others and accesses information (Lenhart et al., 2010).

Facebook continues to be the most popular social media site, but its membership saw little change from 2013 (Duggan et al., 2015). The use of social networking sites (SNS), which arrived commercially about a decade ago, has rapidly gained momentum (Skeels & Grudin, 2009).In the same study, authors mentioned that Facebook describes itself as "a social utility that connects people with friends and others who work, study and live around them." Thompson (2008) as cited in Skeels and Grudin (2009) describes Facebook use in the general population as fostering "ambient awareness" and maintenance of weak ties: obtaining a greater understanding of people with whom one may rarely interact through a series of glimpses, brief updates about events, successes, and frustrations that may be unexceptional taken one at a time.

Watkins and Wilkins (2011) reported that in February 2005, YouTube hosts videos that are cumulatively currently viewed more than 2 billion times each day ("Timeline," 2011). You tube is also used by the pre-service teachers to enhance instruction. Videos were utilized in teaching and learning. Trusov, Bucklin, and Pauwels (2009)cited that typical social networking sites allow a user to build and maintain a network of friends for social or professional interaction. The resource, YouTube.com, is an online video repository in which nearly any digital video file can be stored and exhibited free of charge (Watkins & Wilkins,2011). According to you tube fact (2007) that YouTube is a video-sharing Web site where users can upload, view, and share video clips online. It has 55 million unique users each month and more than 10 million monthly users younger than 18 years of age. Thus, your people such as the pre-

service teachers are you tube passionate. Berk (2009) as cited in Watkins and Wilkins (2011) has examined the use of video clips in college classrooms and provided a detailed rationale and conceptual framework for the practice. One of the respondents disclosed that YouTube remains a valid resource for pre-service teachers seeking to enhance their lessons with lively and topical content.

Dede (2010) disclose that the 21st century is quite different than the 20th in the capabilities people need for work, citizenship, and self-actualization. There are 176 pre-service teachers using Instagram. Twitter is also very popular to the pre-service teachers. People use Twitter to communicate, to ask questions, to ask for directions, support, advice, and to validate open-ended interpretations or ideas by discussing with the others (Grosseck & Holotescu, 2008).

Blogging, LinkedIn and Tumblr are also familiar to the pre-service teachers. Professionals utilized blogs in posting assignments and other instructional materials for learning. Eighty percent of the pre-service teachers used blogs in teaching and learning. 'Blogs' have evolved along similar lines to other forms of human communication in that they are a product of convenience rather than design (Williams & Jacobs, 2004). The growing popularity of blogs suggests the possibility that some of the work that students need to does in order to read well respond critically and write vigorously might be accomplished under circumstances dramatically different from those currently utilized in higher education (Duffy & Bruns,2006).

The least social networking sites utilized is Pinterest. According to the respondents, they are not familiar with Pinterest. Electronic transactions over the Internet – or e-commerce – are often considered to have reduced transaction costs, enabling markets to function where hierarchy might have prevailed otherwise (Lampe, Ellison & Steinfield, 2007). Thus, utilization of smart social networking sites have contributed to the increase of academic performance as revealed by the pre-service teachers.

Table 1: Common Activities conducted by the Pre-service teachers

	f	%
Create conversations with students and other pre-service teachers	200	96.61%
Find and engage with students	188	90.82%
Load your social editorial calendar	145	70.04%
Monitor and respond to messages and projects submitted	201	97.1%
Respond to inbound social messages	205	99.03%
Research the social media industry	192	92.75%
Assessing social media sites and their toolsets	177	85.5%

According to SocialTimes, social media is quickly turning into one of the most popular channels for clients. In addition to collaborating face-to-face with colleagues across a conference table, 21st century workers increasingly accomplish tasks through mediated interactions with peers halfway across the world whom they may never meet face-to-face (Dede, 2010). Reiser, Tabak, and Sandoval (2001) as cited in Hofstein and Lunetta (2004) mention that inquiry empowering software can also "provide scaffolding to support scientific practice and can be integral in new inquiry practices".

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The success of social media environments rests on the correct balance of these elements (Burke, 2009).Selber (2004) as cited in Vie (2008) reveals that students need instruction that will help them gain an awareness of technological literacy practices as well as help them become adept at researching and using technological tools. Pempek (2009) quoted that social networking sites are designed to foster social interaction in a virtual environment. In the same study, users can interact by sending private messages, similar to emailing. The students who are "friends" may post public messages on each other's "walls," which are personal message boards on their profiles.

Table 2: Smart Social Networking Checklist

Checklists	f	%
I know my friends?	205	99.03%
I can see content on my account	189	91.3%
I know about the teenage user updates	123	59.42%
I can use Social Networking's Reporting Tools	186	89.86%
I deactivate my account	190	91.79%
I change the ads when I see necessary	201	97.1%
I can manage Friends lists	203	98.07%
I can take control of my Apps and Games	187	90.34%

Intelligent tutoring systems, virtual laboratories, and feedback mechanisms that capture rich information about student performance and help students transfer their learning to new situations (Lombardi, 2007). Pre-service teachers find friends through social networking sites. According to Pempek (2009), Facebook use was integrated into students' daily lives, regardless of how busy they were.

5.0 Conclusion

Smart social networking requires critical-thinking and metacognitive skills and the ability to integrate and evaluate real-world scenarios and authentic learning skills for validation. Technology in the 21st centuryserves as an extraordinary tool to shape and enhance the learning environment. Digital literacy skills are absolutely necessary to ensure the technology is used to supplement—and not substitute for—high-quality instructional methods. Pre-service teachers using digital technology with valuable skills is the most powerful tools in teaching in the 21st century.

6.0 Recommendation

Based on the findings if the study, it is recommended that the pre-service teachers will undergo training on proper use of social media and other ICT tools in the 21st century. Furthermore, the conduct of ICT researches as a powerful tool of knowing and developing a master plan for better educational reforms, assessment practices; economic upliftment and policy formulation may be conducted.

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