The Use Of Social Networking Sites For Learning In Institutions Of Higher Learning

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Abstract: Institutions of higher learning are facing greater challenges to change and subjected to various transformations in the surrounding environment including technology. These challenge and motivate them to explore new ways to improve their teaching approaches. This study sought to investigate the use of social networking site in institutions of higher learning. To this end two objectives were formulated (1) to investigate the current state of the use of social networking sites by the students (2) investigate how social networking sites can be used to promote authentic learning in institutions of higher learning. The study adopted exploratory approach using descriptive survey design where a sample of 10% (67 students) were picked from Jomo Kenyatta University of Agriculture and Technology (JKUAT) main campus. The findings indicate the use of social networking sites is a viable option as the students are not only members of social networking sites but also that majority have access to the requisite technological devices. Additionally, recommendations for ensuring authentic learning were presented. The researcher recommends the exploration of the leveraging of the existing social networking sites for learning in conjunction with key stakeholders.

Index Terms - Social networking sites, learning, institutions, higher education

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1 INTRODUCTION

Most students in today higher education institutions are using technology informally in every aspect of their lives, like playing computer games for communication and collaboration. For instance, Lenhart, Purcell, Smith, & Zickuhr (2010) found that 72% of all college students have a social media profile with 45% of college students using a social media site at least once a day. The needs and expectations of 21st century learners and learning environments are changing enormously. Students are now frequent users of Facebook, Twitter, MySpace, and other social networking technologies (Oradini & Saunders, 2008; Cubukcuoglu & Elci, 2012). Boyd & Ellison (2008) define social networking sites are as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site (Boyd & Ellison, 2008). The public display of connections is a crucial component of SNSs. The Friends list contains links to each Friend's profile, enabling viewers to traverse the network graph by clicking through the Friends lists. On most sites, the list of Friends is visible to anyone who is permitted to view the profile, although there are exceptions. While SNSs have implemented a wide variety of technical features, their backbone consists of visible profiles that display an articulated list of Friends who are also users of the system. Beyond profiles, Friends, comments, and private messaging, SNSs vary greatly in their features and user base. Some have photo-sharing or video-sharing capabilities; others have built-in blogging and instant messaging technology (Sunde´n, 2003, p. 3; Boyd & Ellison, 2008)

1.1 Problem statement

Studies have indicated that higher education institutions are facing greater challenges to change and subjected to various transformations in the surrounding environment. Higher education is battling new disruptive forces that have proactively challenged higher education and motivated many tutors to explore new ways to improve their teaching approaches. For these institutions to remain relevant, one of the proposed strategies is to embrace a new teaching and learning approach including the incorporation of Web 2.0 learning which include social networking sites. Being used to

constant engagement and multitasking in their day-to-day activities, students need a high level of social and creative engagement in learning. Traditional teaching approaches favoring passive content consumption, therefore, are no longer applicable and have to be substituted, or at least complemented, with highly interactive learning processes (Jovanovic, Chiong, & Weise, 2012).

1.2 Research Objectives

The main objective of this study is to investigate the use of social networking sites in institutions of higher learning in Kenya. The study sought to achieve the following specific objectives:

i.   To determine the current state of the use of social networking sites by students in institutions of higher learning

ii.   To investigate how social networking sites can be used to promote authentic learning in institutions of higher learning

1.3 Significance of the Study

The impact of social networks and web technology on organizations, especially educational institutions in Kenya, has not been analysed in literature. This is a trend in which the world is moving to and thus research needs to be done on how the social networking sites are affecting educational institutions. For us to make meaningful benefit from the use of social networking sites like Facebook, twitter, LinkedIn among others, then there is need for a study to be done to determine the extent of their use and their pedagogical benefits. According to Ito et al., (2009) and Jenkins (2006), educators should be aware of these new platforms because today many students learn in new ways using social media. The findings of this study will be of great help to the education sector in general to come up with policies on SNS usage so as to produce students who are adaptable in social network usage as and can leverage them on all aspects of their lives.

2 LITERATURE REVIEW

2.1 Social Networking Sites and Learning

There is clearly something appealing in web-based social services. In social networking sites a user can participate intensively in activities in the service, share contents, debate

and share opinions and create different kinds of groups for different needs (Silius, et al., 2010). Kärkkäinen (2007) observed that one of the crucial problems in university level studies is that the very early steps at the beginning of studies are the most difficult for many students. One reason for this is that only a few new students know any of their peers at the beginning of studies in their new university. The integration of students into a student community can be supported in many ways. One method is to use the opportunities, techniques and customs offered by social media (Kärkkäinen, 2007 as cited in Silius, et al., 2010) As a result of the ubiquitous nature and pervasive informational function of interactive digital and mobile technologies, social media (SM) has now transformed from being used informally in educational settings to gaining formal acceptance by students, faculty, and administrators (Tess, 2013; Voorn & Kommers, 2013; Waldeck & Dougherty, 2012; Wang et al., 2012). This represents a major paradigm shift in education today. Interactive and mobile technologies, under the domain of Web 2.0 communications, span a wide variety of mediums such as blogs, wikis, social networking, and virtual worlds (Moran & Tinti-Kane, 2012). The unique attributes represented across all SM forums are encompassed by the following functional features: communication, collaboration, community, creativity, and convergence (see Friedman & Friedman, 2013). Such attributes enable more unrestricted and participatory discursive practices, which are at the heart of the instructional-learning praxis (Selwyn, 2011). Today's students and educators live in the world of Facebook, Twitter, Wikipedia and YouTube. These and many other social networking and social media applications are part of the so-called Social Web (i.e., Web 2.0), best characterized by the notions of social interaction, content sharing, and collective intelligence. In addition, today's students, have spent most of their time on computers, game consoles, digital music players, video cameras, cell phones, as well as the Web itself. Being used to constant engagement and multitasking in their day-to-day activities, students need a high level of social and creative engagement in learning. Traditional teaching approaches favouring passive content consumption, therefore, are no longer applicable and have to be substituted, or at least complemented, with highly interactive learning processes (Jovanovic, Chiong, & Weise, 2012). Higher Education (HE) teaching practices have evolved over the last twenty years, with more emphasis on student-centered pedagogy. There is an increased expectation placed onto the role that technology can play to harness effective learning. However, one could argue that there remains disconnect between our ambition for interactive learning through technology and the realities of our practice (Roblyer, McDaniel, Webb, Herman, & Witty, 2010) In regards to distance learning, and in contrast to SNS, course management systems (CMS), such as Blackboard and Moodle, tend to be very focused (mainly on course content) and lack the personal touch and networking capacity that SNSs offer. For example, instructors using CMS may pose a question in an online discussion board and each student posts a response. However, these student posts are really not interactions at all, but merely question and answer sessions. Using an SNS that is user centered, rather than class centered, such as a CMS, has the potential to increase student engagement. SNSs can actively encourage online community building, extending learning beyond the boundaries of the classroom (Smith, 2009; Brady, Holcomb, & Smith, 2010).

2.2 Empirical Review

Piotrowski, (2015) notes that there has been wide academic and research interest in the application of Social Media (SM) modalities, as instructional tools, in contemporary educational settings. Research addressing the specific issue regarding the benefits and drawbacks of SM uses and applications for coursework and academic purposes has been quite active in recent years. Although much of the research attention has been optimistic in tone some educational researchers have remained cautious. (Ajjan & Hartshorne, 2008; Brown, 2012). This section highlights the major outcome of studies focusing on SNS, SM and education. Dron and Anderson (2009b) researched on an online undergraduate course taught via Elgg social networking site and revealed that the learner experience was generally positive but students were 'lost in social space' and therefore the need for support and scaffolding to participate in the social network (Dron and Anderson, 2009b). Educators acknowledge the supportive functions of Web 2.0 technology in fostering student learning, i.e., engagement, encouragement of autonomy, intentionality, reflection, and community (Chen, Lambert, & Guidry, 2010; Dunlap & Lowenthal, 2011). Critics contend that while there are benefits to accommodating the neo-millennial tech-friendly learning style, instructors need to assure and promote critical thinking and literacy skills in today's students (Everson, Gundlach, & Miller, 2013). At the same time, aggregate findings indicate that Web 2.0 technologies can enhance college student engagement, academic performance, and faculty-student interaction, as well as foster administrative communication with students (Collis & Moonen, 2008; Hemmi et al., 2009; Hrastinski & Aghaee, 2012; Junco et al., 2011; Mazman & Usluel, 2010). Moreover, SM applications have been found efficacious in graduate-level coursework (Meyer, 2010). Greenhow & Gleason (2012) explore the use of Twitter as a new literacy practice. They suggest that when used in higher education, it may lead to increased engagement and better interaction between students and teachers. This view is also shared by Fusch, 2011) who argues that the tools of the trade are as important as the learning objectives, and that tools are needed which promote social presence, create a more interactive learning environment and foster collaborative study. Brady, Holcomb, & Smith, (2010) conducted research on the use of alternative social networking sites in higher educational settings: a case study of the E-Learning benefits of Ning in education. In order to evaluate the largely unexplored educational benefits of SNSs, they surveyed graduate students enrolled in distance education courses using Ning in Education, an education-based SNS, based on their attitudes toward SNSs as productive online tools for teaching and learning. The results of our study suggest that education-based SNSs can be used most effectively in distance education courses as a technological tool for improved online communications among students in higher distance education courses. Miss, Omekwu, & Nneka, (2014) did a study on the use of social networking sites among the undergraduate students of university of Nigeria, Nsukka. They revealed that mostly all the students were using the social networking sites in interaction with friends, connecting to their class mates for online study and for discussing serious national issues and watching movies. There are also laudable benefits of using social networking sites and dangers associated with social networking and such dangers can be ameliorated using the strategies available in the work. Drawn from the findings, it

was recommended that university Authorities should organize seminars to enlighten students on the not-so good aspects of social networking sites.

3 RESEARCH METHODOLOGY

3.1 Research design
According to Cooper & Schindler (2006), research design is the manner, in which data is collected, measured and analyzed in order to achieve certain research objectives. The study adopted exploratory approach using descriptive survey design to investigate the leveraging of social media in universities to enhance learning, how their use could and affects the students' learning and how they can be used to enhance learning. Descriptive survey designs were used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho&Kombo, 2002).

3.2 Study Setting
The study was carried out in Jomo Kenyatta University of Agriculture and Technology (JKUAT) a public university near Nairobi, Kenya. It is situated in Juja, 36 kilometres northeast of Nairobi along the Nairobi-Thika Super-Highway. The researcher chose JKUAT because it is a technology Hub.

3.3 Study Population
The population for this study were students of the School of computing JKUAT main campus Juja who as of Septembers 2015 were 675. This was because these the students had not only access to computers and other technological devices for their academic work but are also informed on the technological trends. They were therefore better placed to provide the information required by research and propose solutions and better approaches to the subject matter. Additionally, they were able to provide insights and criticisms in the development of the model.

3.4 Sample size
Simple random sampling was used to obtain 10% of the students who were respondents of the study. Kothari (2009), also indicates that 10% of the target population is representative sampling frame for the research. Additionally, the respondents were required to be active members of at-least one social networking site.

3.5 Data Collection
The data collection methods used were for both primary and secondary sources. Questionnaires were established to be the most appropriate form of data collection because they are both cost effective and save a lot of time. The questionnaire contained both open and closed ended questions. Secondary data was extracted from sources provided by the respondents' organizations as well as from recent journals, articles, theses, papers and credible and reliable internet sources to for the purpose of references.

3.6 Analysis and Presentation
Content analysis and descriptive analysis such as mean, frequencies and percentages were used to analyse the data. Inferential statistics such as correlation models and Chi square were also used. The organized data was interpreted on account of concurrence to objectives using Statistical Package for Social Scientists version 22 to communicate research findings. Frequency distribution tables, pie charts and histograms were used where appropriate so as to ensure that the research is clear and easily understandable. After the analysis and interpretation of data, a final report was written to provide a summary of the findings.

4 FINDINGS AND DISCUSSIONS

4.1 Demographic Information
The survey setting was Jommo Kenyatta University of Agriculture and Technology. The respondents were students from the School of computing. The researcher sought to find out the gender of the respondents. The findings are indicated in Figure 4.1.
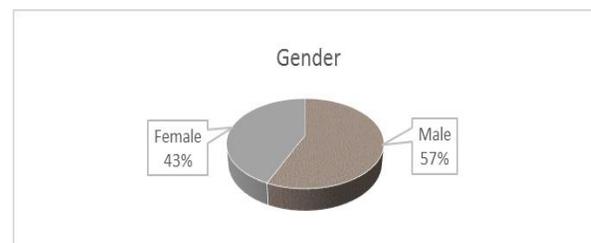
4.2 Demographic information

Figure 1: Gender of the respondents

According to the study findings an as indicated in Figure 1, majority of the respondents 57% were male while 43% of the respondents were female.

4.3 State use the use of social networking sites
The researcher sought to find out to which Social Networking Sites the respondents were subscribed as members. This was aimed at establishing which SNS were most popular and preferred among the students. The survey findings are indicated in Figure 2.
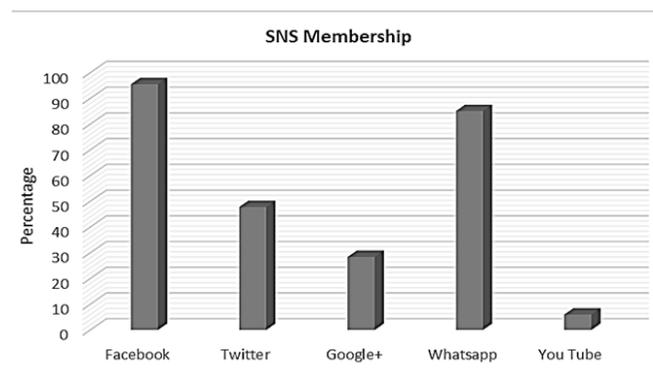

Figure 2: SNS membership

According to the survey majority of the respondents 95.5% (n=64) were members of Facebook, followed by WhatsApp with 85.1% (n=57), Twitter and Google+ with 47.8 and 28.4% respectively. YouTube had 6% however worth noting is that a higher percentage than this accessed YouTube but had not subscribed as members. Other sites that minority of the respondents were subscribed to include; Instagram, 2go,

Badoo, and LinkedIn. The researcher further sought to establish what the social networking sites were used for by the respondents. The findings are presented in the Figure 3 below.
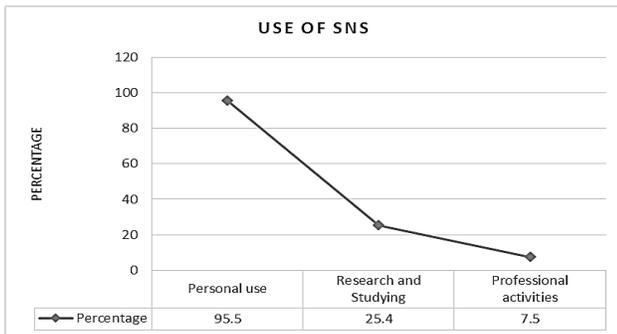

Figure 3: *The use of SNS*

The findings indicated that majority of the respondents, 95.5%, mostly use their social networking sites for personal use including connecting and catching up with friends and families and initiating new personal connections. This can be explained by the innate nature of these SNS. The sites are also used by 25.4% of the respondents for research and studying while a minority of the respondents 7.5% use them for professional activities.

4.4 Enabling Authentic Learning through Social Networking Sites

Authentic/genuine learning activities enable learners to practice skills in environments similar to those in which the skills will be used. Authentic activities are real-world tasks that a person can expect to encounter on the job, in the home, or in other social contexts. The researcher sought to determine how authenticity can be enabled using social media. The responses were categorized and are as presented in Table 1.

Table 1: *Promoting Authentic learning using SNS*

Response	Frequency	Percent
Encourage authentic communication	53	79.1
Promoting team work	50	74.6
Ensuring access to relevant information by lecturers/tutors	50	74.6
Challenging with authentic tasks that drive the need to use, transform, apply, and reinterpret that information	46	68.7
Increased interaction and connection with relevant professionals	41	61.1
An empowered user content generation	34	50.7

The study found out that according to majority of the respondents, 79.1% (n=53), encouraging authentic communication is a significant factor in enabling authentic learning through social networking sites. This means that the respondents felt that the SNS should be run by their peers while the university plays the supervisory and monitoring role without micromanaging. That is, they preferred a student-run SNS. Additionally, 74.6% of the respondents were of the opinion that lecturers/tutors should ensure or provide access to relevant information including; research results, practical simulations, and other forms of real-world or simulated data in appropriate format. The respondents, 68.7%, said that the

SNS they should also be challenged with authentic tasks that drive the need to use, transform, apply, and reinterpret the information and lessons learnt. These include conducting exercises, playing instructional games, and engaging in high-fidelity simulations or other forms of virtual reality experiences on the Web. There should also be increased interaction and connection with relevant verified professionals who would share their real life experiences and act as mentors according to 61.1% of the respondents. An empowered user content generation would also encourage authentic learning using SNS according to 50.7% of the respondents. This entails encouraging the students to create use and share their own contents through the various options available to them including blogging, tagging and presentations.

5 SUMMARY OF THE FINDINGS

The study which was conducted at Jomo Kenyatta University of Agriculture and Technology main campus established that majority of the respondents were male. To access the social networking sites users, need devices with access to the internet. The researcher found out that majority of the respondents had regular access to mobile phones, the computer lab, laptop computers, and tablets. Others options available included internet/cyber cafes and family or friends' devices. In regards to which Social Networking Sites the respondents were subscribed to as members, the study established that majority were on Facebook, WhatsApp, Twitter and Google+ respectively. Notably, YouTube was used by a significant number of respondents, however, most were not subscribed as members. Social Networking Sites were mainly used for personal use including connecting and catching up with friends and families and initiating new personal connections. A significant number of respondents used these sites for research and studying while minority use them for professional activities. The survey found out that in regards to sourcing for academic related information, majority of the respondents used search engines, tutors/lecturers, and online experts (including sites such as Quora, and Lynda.com). Worth noting here is that most of the primary sources of the respondent's source academic information are online sources.

5.3 Promoting Authentic Learning through SNS

In an effort to promote authentic learning through social networking sites, the respondents were of the opinion that encouraging authentic communication by letting these sites be run by their peers. The university therefore would play an oversight and supervisory role. Also the respondents felt that lecturers/tutors should provide access to relevant information including; research results, practical simulations, and other forms of real-world or simulated data in appropriate format. There should also be authentic challenging tasks that drive the need to use, transform, apply, and reinterpret the information and lessons learnt. Opportunities should also be provided to interact and connect with professionals in relevant fields. Finally, the SNS should empower user content generation encouraging the students to create use and share their own contents through the various options available to them including blogging, tagging and presentations.

5.1 Enhancing Learning Experience through SNS

The respondents believed that the existing social networking sites can enhance their learning experience. To ensure this the

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respondents had a variety of suggestions. Majority of them were of the opinion that there should be enhanced participation in general discussion about course topics and also extending formal learning to informal learning beyond the classroom. They also felt that the SNS should provide greater flexibility to participate and to accommodate passive students (e.g. by use of aliases). Another way would be to increase interaction by students to facilitate learning and collaboration amongst peers (this could be done through team activities). The social networking sites should also enhance communication and interaction between students and lecturers for instance by facilitating other engagements and meetings outside the social networking site. The SNS should provide notifications and updates and also strengthen interpersonal relationships. Another option that could be explored would be connecting off-site visitors to online events based on real-life activities taking place at the school such as seminars and workshops.

5.2 Promoting Interactive, Engaging and Individual Learning

In order to promote interactive, engaging and individual learning using the social networking sites, the respondents provided various suggestions. Majority were of the opinion that team based learning activities and support groups should be made available and the creation of informal learning spaces to complement the formal ones. Additionally, the SNS should encourage feedback from lecturers and openness to suggestions. The SNS should also provide real-time access to materials in various formats e.g. video, links, audio. The SNS setup should also be in such a way as to teach social media skills, provide continued support and encourage students to share work socially including blogging, presentation, and multimedia. Respondents also felt that incorporating the various learning functionalities of SNS including apps, games, and simulations would promote interactive, engaging and individual learning.

5.4 Conclusion

The study indicated that majority of the students in institutions of higher learning institutions have access to the required technological devices to access the internet and therefore social networking sites including phones, tablets, and laptops. Most students also are subscribed to various social media sites with the most popular being Facebook, Twitter and Google+. These sites were mainly used for initiating, maintaining and creating personal connections with some using them for academic purposes and few for professional purposes. The students prefer to use search engines, tutors/lecturers, and online experts when sourcing for academic related information. To enhance authentic learning through social networking sites, encouraging authentic communication by letting these sites be run by their peers with the university being the oversight body was considered significant. This will empower user content generation; this could be done through the various options available to them including blogging, tagging and presentations. Also, lecturers/tutors should provide access to relevant information on this sites that include authentic challenging tasks that drive the need to use, transform, apply, and reinterpret the information and lessons learnt. The social networking site should facilitate connection and interaction of students and professionals in the relevant fields of study.

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