

Survey: Using Social Media in Teaching and Learning concerns and issues

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Abstract— Social media is playing a vital role in many sectors including the higher education and academic activities. Over the years it has become gradually key for those of us working in higher education to explore the available facilities of the new technologies for institutions, educators and students. However, with wide spread fears that social media may be a distractor to educational process, this study presents the previous studies related to how social media facilitates teaching and learning, the issued and concerns.

Index Terms— Blog, classroom, e-learning, higher education, social media, teaching tools.

1 INTRODUCTION

Lecturing is a term that seems to be either taken for granted or misused by most instructors. Normally, lecturers go to class loaded with course content to deliver to students while being mindful of the limited time they are assigned per week, month or semester [13]. Since the evolution of social media technologies such as Twitter and blogs, it can jointly be an impetus to enable both students and instructors actively and instantly participate and communicate with each other on educational activities. It is possible for end-users to make use of mobile and web-based technologies to share, co-create, discuss and modify user-generated content via these highly innovative platforms. People can now learn on online networks outside of the control of the institution, and depending on the nature of the connections made, the learning experience will vary. However, the dramatically changed social and cultural environments do not seem to lead to similar changes in schools due to many factors including rigid school networking policies, hardware availability, and the complexity of effective technology integration [8]. Thus, for the purpose of this study, investigates how social media facilitates teaching and learning process, the issued and concerns according to the previous studies and researches.

2 RELATED WORK

In 2012, Baiyun Chen and Thomas Bryer provided qualitative empirical assistance for the concepts of social learning while providing strategies and examples of how to use social media to link formal and informal learning [1]. How to use social media to promote student learning was one of the key issues of concern in this research study. In this study, the participants' experience indicated strategies for integrating these techniques, not only in formal in-class settings, but, more importantly, to promote learner-centered and informal social and active learning. The research confirmed that learning can be

accomplished if informal social networks are facilitated and driven by the agenda.

Sarah Edith et al. suggested a survey in 2013 to use Twitter as a medical education teaching tool [2]. A literature research study was conducted on several databases, internet sources and blogs examining Twitter's use in higher education. They developed 12 tips to use Twitter as a teaching tool and structured them into: the mechanics of using Twitter, suggestions and proofs to incorporate Twitter into many situations of medical education. This is in addition to promote research into using Twitter in medical education. In addition, a literature research was performed using Twitter, education, medical education, health care, and microblogging combinations. In the conducted study, several databases were searched for: PubMed, which produced 20 papers, 12 of which were considered suitable. Besides, a search by Google Scholar produced 80 papers, 16 of which were considered suitable. Moreover, seven papers were published in a Google search and two papers associated to medical education and Twitter were published in an ERIC search. For all articles, the reference parts were evaluated, and further articles were requested. However, this technique has not discovered any new articles. Finally, through references from other papers, several blogs and online sources have been discovered.

Tanja E Bosch [3] released an article at the University of Cape Town in 2013 exploring student use of Facebook as well as engaging lecturers with learners through the new social media. Based on virtual ethnography and qualitative interviews, this paper showed that the use of Facebook in teaching and learning, especially for the growth of academic micro-communities, has potential beneficial advantages. However, this had some issues that are stay relevant, including ICT literacy and uneven access. A virtual ethnography and qualitative content analysis of 200 UCT student Facebook profiles were the main methodology for the research. Furthermore, in the study, semi-structured qualitative interviews were performed with a purposeful sample of 50 undergraduate learners and five presentations presently engaged via Facebook with their learners. The focus was on graduate students because they are usually the website's heaviest users (Stutzman 2008). Additionally, many graduate students also work full-time employment, and as suggested by Stutzman (ibid.) may use Fa-

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cebook more for networking than for social management. Facebook is one of many Web 2.0 tools-wikis, delicious, YouTube, podcasts-mentioned as having prospective teaching and learning apps. In addition, it was asserted that the present youth generation, often referred to as Net Geners or Digital Natives, may be resistant to traditional teaching and learning techniques. The search for and retrieval of data on the Internet may have resulted in a change in teaching styles, requiring more interactive environments and more practical inquiry-based learning methods.

Joanne Gikas and Michael M. Grant proposed a research in 2013 to investigate the teaching and learning methods when mobile computing devices, such as cell phones and smartphones, were introduced in higher education [4]. They provided a part of the results on the learning perceptions of learners with mobile computing devices and the social media roles they played. This qualitative study of researches concentrated on learners from three universities across the United States. For at least two semesters, the educators of the learners had integrated mobile computing devices like cell phones and smartphones into their classes. Data were gathered through interviews with the student focus group. Two specific topics emerged from the interview data: (a) the advantages of student learning mobile computing devices and (b) the frustration of learning with mobile computing devices. Mobile computing devices and social media use developed interaction possibilities, offered possibilities for cooperation, and enabled learners to participate in content development and communication using social media and Web 2.0 tools with continuous connectivity support. The aim of this study was to add importance and opportunities in greater education teaching settings for mobile computing systems and social media. The respondents acknowledged changes in their teaching regardless of the constraints identified, including fear of technology not functioning correctly, tiny mobile device keyboards making typing hard, and potential device distractions.

Douglas A. Powell et al. suggested a survey in academic practice in 2012 to use blogs and new media [5]. From their study, they found that researchers and extension staff at higher education organizations, and particularly publicly financed higher education institutions, should be encouraged to use new media including blogs to reinforce relationships with public stakeholders and enable interested people to communicate directly with research subject matter specialists. These connections can be proactively reinforced before crises or emerging threat events such as outbreaks of foodborne disease or natural disasters. While being more transparent and nimble with outcomes does not substitute peer review rigors, blogs and other online communication forums constitute an extra mechanism for fast sharing of thoughts, methodologies, and findings from studies. Disclosure of the processes used for the procurement and transmission of data should be given and references should be quoted as suitable. Moreover, the accessibility of new media, such as blogs, helps to build a multi-way dialog and exchange of thoughts to complement traditional ways of communication used in studies, teaching, learning and expansion job in higher education organizations.

Eva Kassens produced a survey in 2012 to ask if using

Twitter helps learners learn a topic [6]. And if so, Twitter provides benefits in learning environments over more traditional techniques of teaching. This exploratory research demonstrated future possibilities and pitfalls that Twitter could bring in higher education to the e-learning society. In addition, this study filled the largely unexplored Twitter territory with some knowledge gaps. Besides, Twitter has some different benefits and disadvantages over traditional teamwork as an active, casual teaching tool. The advantages are that Twitter can foster a group's combined knowledge-building better than the diaries and discussion of individuals, because Twitter facilitates the sharing of ideas beyond the classroom through an online platform that allows random access to such discussion to continue. Twitter's disadvantages are to restrict critical thinking and self-reflection due to the personality limit of the tweets. This research contradicts the finding that learners who use Twitter exhibited openness to emotions and their own deficiencies more easily and more readily. Instead, this study suggests that the diary-keeping students showed a stronger self-reflection display: more students identified their own flaws, while Twitter students only identified other students' faults. There are several constraints to this research. First, the small sample size limits the performance generalizability. Having six learners in each group only permitted the teaching community to glimpse the benefits and disadvantages that Twitter could offer. Second, how this research measured the use, development and retention of information is obviously restricted. All techniques of evaluation involve apparent biases, as the implementation, development and retention of information is not equal to writing in diaries or on Twitter or to recalling facts in a quiz. However, as proxies, the five mixed sources give significant lessons on the importance of using Twitter as a fresh method of learning. Third, the research only spanned more than a month. Because of these constraints, future research should sample a bigger study group, observe the development and implementation of information by learners over longer periods of time, and apply both teaching methods to a multitude of subjects to provide further insight into Twitter's advantages and pitfalls.

In 2011, Rita Kop introduced a research paper that raised questions about the learner's level of autonomy, presence, and critical literacy needed for active learning connectivism [7]. In this study, a mixed-method method was used. In addition, a lot of surveys were performed, consisting of a combination of quantitative and qualitative issues, while observations, discourse analysis and secondary data analysis were also performed in the form of teaching analytics to capture and analyze information. There was also a focus group of lurkers, as it was difficult to obtain a knowledge of their experiences from learning environment operations because they were invisible to the viewer. Data were gathered using the #PLENK2010 tag on the Moodle course forums and wiki, the participant blogs and Twitter messages as well as on any other internet events. Due to the quantity of information produced by the respondents and facilitators and the time limitations for producing this paper, a limited quantitative analysis of blog posts, Twitter and Moodle involvement was possible and the qualitative analysis of information for this article was limited

to the Moodle setting and a sample of participant blogs. The study showed that there are some other conditions that obviously encouraged people's involvement and commitment in teaching in a teaching setting for connectivism, including the "social presence" of facilitators and participants, which improved the "community" formation and sense of belonging that constructed trust and stimulated active participation.

In 2014, Jin Mao [8] suggested a survey using an explanatory sequential blended method design. The research examined the social media affordances of high school learners, their attitudes and views about these new techniques, and associated barriers and problems. The results of affordance showed that learners rely on social media for recreation and social relations in their daily life. Teachers' educational uses for teaching and learning in the classroom are sporadic, while students' use for learning purposes on their own seems extensive, but also incidental and informal. The proposed quantitative findings indicated that in education, learners generally demonstrate favorable attitudes and views about the use of social media. Exploratory factor assessment disclosed three elements that accounted for a total of 65.4% of the variance: (a) social media usage advantages, (b) social media usage disadvantages, and (c) present social media usage in schooling. Three problems arose from the information of the interview: conceptual understanding of social media for teaching; close-minded, acquired uses versus open-minded, inherent social media uses; and altered teaching ideas. Besides, the research results indicate that complex attempts are needed to design, scaffold and interact with learners during the process in order to use social media as efficient teaching tools and to adjust the previous affordances of learners with these tools.

In 2012, there was G. The article suggested by Vetsianos [9] is to comprehend the naturalistic methods of academics in social networks in general, and especially on Twitter. In order to arrive at dominant topics describing online social network practice, tweets from 45 academics were evaluated qualitatively. Findings suggest that Twitter academics (1) shared data, resources and media related to their professional practice; (2) shared data about their classroom and students; (3) sought help from and suggested suggestions to others; (4) involved in social comment; (5) involved in digital identity and impression management; (6) attempted to network and connect with others; and (7) highlighted their involvement in non-Twitter internet networks. These results help the field understand the evolving practice of internet networks involving academic involvement. The information corpus consisted of each recognized participant's recent 100 tweets, yielding a total of 4,500 tweets. All information was gathered on a single day, although these tweets were published by respondents over a 9-month period with different posting frequencies between respondents. The data was gathered using a mixture of techniques: as outlined above, the first four users were manually found. The Twitter Application Programming Interface (API) was subsequently used to collect lists of user supporters and counts of supporters, finding all their supporters with 2,000 or more supporters. The involvement found on Twitter provides possibilities for such a vision, but it is still too early to transform social spaces online into closely knit groups of

scholars. The snapshot presented in this document is promising, but further inquiry is required for the emerging nature of internet social spaces and internet scholarship.

Milos Jovanovic et al. [10] in 2012 applied classification models to predict the achievement of learners and cluster models to group learners in an e-learning setting based on their cognitive styles. Classification models outlined in this article should assist educators, students and company individuals to engage with learners at an early stage who are probable to be outstanding on a chosen subject. Clustering learners based on cognitive styles and general results should allow the teaching materials to be better adapted to their learning styles. The method is tested using well-established algorithms for information mining and assessed through multiple assessment measures. Model construction method included pre-processing of information, optimization of parameters and choice of attributes, which improved general efficiency. In addition, they suggested a Moodle module enabling the automatic extraction of information required for the assessment of instructional information mining and the deployment of models established in this research. However, there was one issue that was the research had to solve is the absence of information to analyze more thoroughly. This problem is targeted at many distance learning institutions. Usually, there are not many students registered in distance learning systems, which means fewer prospective participants in information mining studies. As a distance learning scheme was implemented at our University only a few years ago, further evaluation and verification of the hypothesis tested in this article will be possible in the future.

Reynol Junco [11] produced a survey to investigate the connection between Facebook use frequency, Facebook involvement, and student engagement in 2012. Student engagement was evaluated in three respects: a scale of 19 items based on the National Student Engagement Survey, time spent preparing for school, and time spent co-curricular activities. Results show that the use of Facebook was considerably predictive of the score of the commitment scale and positive predictive of the time invested in co-curricular activities. In addition, some Facebook operations predicted the dependent variables positively, while others predicted negatively. All students were surveyed at a medium, 4-year, government institution, mainly residential in the Northeast. Students were approached through their on-campus email accounts during the Autumn 2010 semester and sent a connection to a study hosting a commercial survey-hosting website on SurveyMonkey.com. There were sent two extra reminders, each week apart. Participants were provided an opportunity to enter a drawing for an incentive to win one of Amazon.com's 90 cards of the type \$10 gift cards. A total of 2368 studies for a response rate of 44 percent were finished. They found that, based on the result variable, both times spent on Facebook and time spent engaging in certain Facebook operations can be positive predictive, negative predictive, or positive and negative predictive. Time spent on Facebook, for instance, is a positive prediction of time spent co-curricular while playing matches on Facebook is a negative prediction.

In 2016 [12], Stefania Manca and Maria Ranieri sug-

gested a study that would report the outcomes of a survey to the Italian academic employees in order to identify the uses of social media in the field of university teaching methods. The reaction rate was 10.5%, which is 6139. The participants were asked to define use frequency, motivations, teaching methods and barriers associated with using multiple tools. These tools included generic social networking sites (Twitter, Facebook), professional and academic networking services (LinkedIn, ResearchGate and Academia.edu), writing and commenting tools (blogs, wikis) and archiving and retrieving content for presentations and group work (podcasts, YouTube and Vimeo, SlideShare). In addition, this research included an online survey of the professors working in the higher education scheme in Italy. Data analyzes evaluated which socio-demographic factors mainly influenced the frequency of use and the relationships between motivations, methods of use, barriers to use and scientific discipline. The study's findings indicated that the use of social media is still rather limited and restricted and that scholars for several reasons, such as cultural opposition, pedagogical problems or institutional limitations, are not willing to incorporate this equipment into their activities. There are, however, variations between scholars in how they use or perceive social media, mostly depending on the teaching science discipline. Overall, the findings highlight ambivalent attitudes towards social media's benefits and difficulties in the context of higher education, with barriers prevailing over benefits.

Winner Dominic proposed a research in 2017 that integrated Twitter and blogs into two undergraduate courses provided at Mzuzu University's Department of Library and Information Science, a government university in Malawi [13]. Data were gathered in two ways: first, learners analyzed blog posts and Twitter posts, and second, a questionnaire was sent to 64 learners to determine their perception of using blogs and Twitter in a classroom environment. The research results indicated that if properly implemented, Twitter and blogs are catalysts for the highly hyped learner-centered learning strategy because using these techniques, learners shared and discussed course materials, posted their course reflections and interacted with each other and their lecturer 24/7. The challenges encountered include Internet information bundles costs, inaccessible Wi-Fi, bad bandwidth and inadequate computers. Based on the research results, the author indicates some suggestions that can encourage the use of social media at MZUNI or universities with comparable financial and technological backgrounds if applied. First, MZUNI and other greater learning institutions should make the Internet available to all learners freely or highly subsidized. Wi-Fi should also be installed covering the entire campus and available via mobile devices and laptops for learners. Second, it should not be taken for granted that when a teacher incorporates Internet-based systems such as social media into a course, learners can find ways of accessing the Internet. Instead, MZUNI lecturers intending to integrate social media or associated techniques into their classes should create previous agreements with the MZUNI Library and the MZUNI ICT Directorate to ensure that learners have no difficulty accessing computers.

3 CONCLUSION

Recently, social media has gained credibility over the years as a trusted source of information and platform where educational organizations can use with their learners. Therefore, using social media in teaching and learning had received a great attention in the research community. Several studies had been proposed addressing this concern highlighting the related benefits, issues and concerns. It is agreed that internet social media learning provides excellent feedback and benefits that can be inline in educational environment and, of course, with adequate guidance so that it can be used properly. Eventually, while using social media in teaching and learning to teachers, it may be challenging, but when learners participate in their own learning, through efficient cooperation between teachers and learners, education will be successful.

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