

Social Media Sites: Powerful Platforms for Active Online Learning Environment

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Abstract

Online teaching and learning environments have been booming worldwide. However, many universities cannot afford learning management systems. This qualitative study explores the possibility of using social media sites for online instruction due to the fact that their prominent utilities are similar to those of learning management systems. Through purposeful sampling, four university professors using social media sites for online instruction were selected as participants for this research. Data was gathered and triangulated from participant interviews, observations of participants' online courses on social media sites, and documents collected from their online courses. Thematic findings revealed that powerful features: Discussion board, collaboration, and community features of social media sites play vital roles in the active online learning environment. It is believed that the significance of the research findings can be transferred to the similar online instructional contexts where learning management systems cannot be afforded.

Index Terms: Qualitative research, LMS, Social media sites,

I. Introduction

The learning management systems (LMS) like *Blackboard*, *Canvas*, *Desire2Learn*, *Sakai*, or *Moodle* are very excellent in online teaching and learning activities. They have communication tools (e.g., *Announcement*, *Discussion Board*, and *Emails*), they have a good grading management system, and they can keep track of student learning records. However, many schools or universities, especially those in developing countries cannot afford the LMS because of the cost and use complication (Bradford, Porciello, Balkon, & Backus, 2007) [1].

The current trend for instructors at the schools and universities where LMS cannot be afforded is to apply social media sites to their online teaching and learning activities. Social media sites equip learners with necessary tools to synchronously as well as asynchronously collaborate and participate with instructors and peers both inside outside the classroom (Varlas, 2011) [2]. Many researchers have found that social media sites can provide instructors and students with many prominent features that can be compared to those of the above-mentioned learning management systems in teaching and learning activities.

The primary purpose of this study was to examine the perceptions of professors at the universities in West Texas who applied social media sites to their online teaching to examine how social media sites contribute their students' learning activities. This research question guided the study: *How do social media sites contribute to the active online learning environment?*

II. Literature Review

Some research on social media sites have been done, and the researchers have found that social media sites are advantageous to teaching and learning activities.

In their research, Cheon, Song, Jones, & Nam (2011) [3] have found that blogs, one of social media sites, promote student-centered learning activities, increase creativity of students during problem solving, enhance interaction between the teacher and students and among students for building project-based collaboration, and create a rich, engaging, and exciting learning environment. Similarly, Sawmiller (2010) [4] has discovered that using blogs in teaching and learning activities aids in differentiated instruction, increases motivation, and challenges students' critical thinking skills.

One more research from Ellison & Wu (2008) [5] mentions social media sites promote student-centered learning, so students invest more time and energy in their studying and discussion without the fear or shame that they may have in face-to-face classes. They are always aware of their writing and posting something for an internet audience, their instructor, and their peers. As a result, they improve their learning, especially their reading and writing skills. Additionally, social media sites contribute to teaching and learning role changes in online instructional environment. Cowan (2006) [6] and Wang (2006) [7] have indicated that with the support of social media sites, the teacher roles have changed from transmitting knowledge to students to adhering to advising students how to do it. Also, Ellison & Wu (2008), Koopman (2010) [8], Overby (2009) [9], Sawmiller (2010), Soares (2008) [10], Yang (2009) [11], and others have conducted research on social media sites to discover how students feel about using blogs in teaching and learning activities, and all of them found that students have positive attitudes toward using blogs. Students feel that they were motivated in joining the class discussion and giving comments to their peers. In summary, research indicates that social media sites are good for online teaching and learning activities.

III. Methodology

The purpose of this research was to investigate the perceptions of professors at the universities concerning their use of social media sites in their online instruction to see how social media sites contribute to their students' online learning environment. This research is bound in the qualitative paradigm. According to Denzin & Lincoln (1994) [12], Lincoln & Guba (1985) [13], Merriam (1998) [14], and Patton (2002) [15], qualitative research involves collecting information about personal experiences, introspection, life stories, interviews, observations, historical stories, interactions, and visual text which are significant moments and meaningful in people's lives. Therefore, the data sources for this research came from the interviews with the professors at the two universities in West Texas, the observations on their online courses, and their online course documents (materials).

A. Participants

The selection of the participants for this research was based on the purposeful sampling technique which maximized the possibility of identifying participants who provided the best content and context regarding the phenomenon under investigation (Creswell, 2003) [16]. According to Erlandson, Harris, Skipper & Allen (1993) [17], the main goal of purposeful sampling is to focus on particular characteristics of a population that are of interest, which will best enable the researcher to answer the research question. Thus, four professors (with pseudonyms): Lee Kim, Jack Smith, Ann Steven, and Brown Chris, who used social media sites in their online teaching, were chosen for this research. Each professor was interviewed twice in their office, but professor Steven was interviewed via Skype.

B. Data Analysis

Data analysis was an ongoing process. The data were derived from interviews, observations, and documents. The data sources were triangulated. The constant comparison analysis method was used in the informal data collection and analysis. Making informal data analysis helped me see initial similarities and differences in the data to form themes for the findings in the formal data analysis process.

C. Ensuring Trustworthiness

The aim of trustworthiness (*Credibility*, *Transferability*, *Dependability*, and *Confirmability*) in a qualitative inquiry is to support the argument that the inquiry's findings are "worth paying attention to, worth taking account of" (Lincoln & Guba, 1985, p. 290). To meet *Credibility*, I joined the professors' online courses in the Spring 2013 semester and spent most of the time observing the online courses to get data. To facilitate *Transferability*, I employed the thick description and purposeful sampling strategies (Lincoln & Guba, 1985). Thick description was achieved from interviews, observations, and documents from the four professors, and my reflexive journals. The reason for using purposeful sampling to address transferability is that the research findings can be transferred to other similar online teaching contexts. To ensure *Dependability*, I put all the data from each professor in one folder with their name on it in order to provide audit trail (e.g., the documentation of data through interview notes, observation notes, documents, and journals; methods; and decisions about the research) which can be traced back to the raw data and which can be laid open to external scrutiny to make judgments about the products of the study. For *Confirmability*, I employed triangulating data and keeping reflexive journals techniques to dovetail with the audit process for public scrutiny (Lincoln & Guba, 1985).

IV. Findings

This section provides the participants' experiences in using social media sites in their online teaching during the Spring 2013 semester. Their points of view have been constructed from multiple data sources: interviews, observations, documents, and a reflexive journal. Three major themes emerged in the analysis process from the composite of the descriptive cases. The emerged themes were (1) *Discussion board is a vital function of social media sites in an active online learning environment*, (2) *Collaboration plays an important role in an active online learning environment*, and (3) *Community is an outstanding feature contributing to an active online learning environment*. All of these themes answered and supported the research question: *How do social media sites contribute to the active online learning environment?*

A. *Discussion board is a vital function of social media sites in an active online learning environment.*

All professors mentioned that the discussion board in social media sites is vital in an active online learning environment. Professor Kim used *Edmodo*, one of social media sites for his EDIT 5000 course. Professor Kim said:

Online discussion is one of the best ways in social media sites to increase learners' communication and interaction. From the interaction with one another via the discussion board, they become more and more creative in learning [195].

From my observation throughout the course during the spring 2013 semester, there were 460 total posts from the students and the professor's feedback. The posting contents related to discussion topics and their assignments, and they were very meaningful and positive.

Professor Smith used *Facebook* for asynchronous discussion topics and *Lync* for synchronous meetings for his Physics class. Professor Smith said that students' interaction on *Facebook* and *Lync* with the instructor and their peers was effective. Professor Smith said:

The Facebook interaction works best. The discussion board on Facebook is a good place for the students to express their opinions. The students interact more often and strongly. They have Facebook up on their smart phones and computers constantly, and they are interacting every minute [784].

According to the syllabus, the students had seven synchronous meetings via *Lync*. I joined all the meetings and realized that both the instructor and the students raised a lot of questions using the audio and the chat window functions during the meetings. For example, at the sixth synchronous meeting, one of the female students suggested giving a presentation to the class. She said:

Dr. Smith, can I demonstrate my experiment? Please let me know how the experiment works [Observation 2, p.7].

Professor Smith also indicated:

The students like to interact on Facebook and they if they know something they throw it to be explained to their classmates. They like to do that [801].

The data from professor Steven also supported that the discussion board on social media sites was interactive for her online students. She said:

I would say that the students get very energized and enthusiastic in their postings [43]. Well, they are pretty comfortable in the discussion board. They're pretty vocal about what they like and don't like. They like interaction on social media sites [44].

From the class observation I could realize that professor Steven introduced many blogs and social media sites where the students could join discussion boards there. They got the ideas from the people on the blogs or social media sites for the class topics and posted their insights on the class discussion forum. The instructor and their peers gave comments on the ideas on the class blog.

Similarly, professor Chris also emphasized that social media sites were good platforms for his students to practice leadership skills. He set up trio-groups for the class. His students in the trio-groups were encouraged to set up *Facebook* pages to practice communication skills for leaders. He joined the groups to see how the students interacted with one another in the groups. Professor Chris reinforced:

Facebook has a discussion space that is good for my students. My students are school leaders and I want them to practice communication via social media sites. They need to practice real-life skills and real transferable skills, managing social media, your own websites, your school websites, the district websites, and your writing skills. Discussion forum on Face book is a good space for you to fulfill this practice [1839].

The data from the professors proved that the discussion feature on social media sites is truly vital for the interactive online learning environment.

B. Collaboration plays an important role in an active online learning environment.

All professors in the research indicated that social media sites equip learners with necessary tools to collaborate and participate with instructors and peers both in and outside the classroom. Learners can exchange ideas and work both synchronously and asynchronously together on collaborative projects.

Professor Kim mentioned that instructors had to design some collaborative projects during the semester for students in order to motivate collaboration with their partners. The instructor should think of teaching activities and then choose tools for the activities. In fact, he designed eleven assignments (Document 1, p. 20) for the class during the semester. Students had to collaborate with one another to complete the tasks. He shared his online teaching experiences:

I know that students can learn by doing and they can learn by collaboration. I design some learning activities and introduce social media sites like Facebook, PbWorks, Wikis, Edmodo, Skype, and SecondLife to the students. The students have to choose the right tools for their collaborative projects. Social media sites have prominent features for collaborative projects [28].

In addition, professor Smith also indicated that most social media sites have collaborative features to help students increase interaction for their group work projects. He said:

Wikis and SeondLife have good features for my students to work on their collaborative experiments. They set up their group account, collaborate on the experiments, and practice presentation. They can say something in their group that they cannot say to the whole class [842].

Similarly, professor Steven added that the collaborative features of social media sites were useful for project collaboration. She created three collaborative health writing projects for the class (Document 3, p. 31). The students in the groups had to personally look for the project information on blogs or social media sites, and they had to choose a social media site (e.g., WordPress) to collaborate on the group work project and post the group idea on the class discussion forum. The students learned from doing and collaboration. Professor Steven said:

Social media sites (e.g., Wikis or WordPress) are good platforms for students to work on collaborative projects. They can share ideas among the group members, edit the project, and learn from one another [1135].

In addition, the data from professor Chris indicated that collaborative features of Wikis and blogs were valuable for his class. The three collaborative presentations on blogs were good opportunities for the students to practice the public communication skills, leadership skills, and teaching techniques for their job. Professor Chris reinforced:

Some of my students in the trio-groups chose the social media sites, like WordPress, PbWorks, or Facebook for their own group for their projects. They use these tools to collaborate on the projects. There were happy with the tools [1915].

C. Community is an outstanding feature contributing to an active online learning environment.

One of the most wonderful features of social media sites is to allow users to form communities and subcommunities. In the online learning environment, students can choose a suitable social media site for their group or community, and they can share and get ideas from the community for their class projects or assignments. Professor Steven and professor Chris appreciate the ‘community’ feature of social media sites for their online courses. They pointed out this prominent feature of social media sites effectively contributes to students’ active online learning environment.

Professor Steven said:

Social media site is a place where all kinds of people come together. So, the number and the type of people that engage in those is a huge, huge benefit to me as well my students. Many of the sites look good, you know they are fun and they are entertaining. So that's good for the students to practice social communication skills [73].

For her course, Professor Steven introduced some social health media sites to the students, and the students had to join the community there to learn diabetes from the people in the American Diabetes Association. The students learned from the authentic cases, got information for their assignments, and posted the ideas on the class discussion forum. She provided one more example by saying:

This past semester there was a lot happening with Obamacare. Since my students are all nurses, we use these blogs several times a week to see what is being said. The students learn from the community [1094].

Similarly, professor Chris valued the community feature of social media sites, so he got the advantages of this feature for his online course. He said:

Building an online community is important. We [the professor and the students] create a space for the class for this semester. I try not to make it threatening or too personal. Something that is safe. I do fun things to build the community. I ask them to mention a favorite right or a favorite movie they can contribute to leadership to build the online community [74].

Since his students were school leaders, he wanted his students to have more opportunities utilize beneficial features of social media sites for their public schools and for their public relations in the future. He emphasized this feature by giving another example:

Using the social media is reality in public schools. When you become a head of the school, you are going to have a Facebook page, and you are going to have a webpage and you might have a blog with the news or the newsletter. You have to communicate with different levels of education and people. So how do you communicate effectively, communicate points of view, data, and how do you respectfully agree or disagree. So the blog is a place to do that [76].

In short, social media sites are good platforms for students to build the community and learn something authentic from the community.

A brief summary of suggested social media sites that contribute to the active online learning environment can be illustrated in Table 1 below.

Table I: Suggested Social Media Sites Contributing To the Active Online Learning Environment

Major Features	Discussion Boards / Forums	Collaboration	Online Communities
Suggested Social Media Sites	Bb Works Blogs Wikis Edmodo Schoolology Yammer	Google Docs Bb Works Blogs Wikis Yammer	Facebook Twitter Blogs LinkedIn Schoolology Yammer

V. Conclusion

The data showed that social media sites are powerful platforms contributing to the active online learning environment. The findings also revealed that the professors were satisfied with the prominent features of social media sites in their online instructional environment. The professors supported the ideas that the discussion board, the collaboration feature, and the community function of social media sites are vital to their online instructional environment and contribute to their students' active online learning activities. They utilized advantages of social media sites for their online teaching purposes.

Social media sites were not only the tools for the professors to implement online teaching activities for students, but also the sites with great sources of available information for both the professors and students to accomplish their online teaching and learning activities. The findings supported the research question: *How do social media sites contribute to the active online learning environment?* The participants in this study were selected based on the purposive sampling technique of using social media sites in online teaching, so the findings can be applied to the similar online instructional contexts. I strongly believe that social media sites can be good platforms for instructors and students in the online instructional environment at schools and universities where LMS cannot be afforded.

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