Functionality of Social Media for Blended learning Courses at Higher Education Institution

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Abstract. Majority of the students in this digital era have social media account. They use social media platforms to interact and collaborate with others. Many higher education institutions have used social media platforms to support online learning for blended learning courses. The study aimed to explore the functionality blocks of social media in learning at higher education institutions. Exploratory study was utilized in the study. Students who attended blended learning courses where the online learning was conducted via social media platforms were involved in the study. Census comprises of 101 students from five courses from five programs at Universiti Teknologi MARA, Sarawak Branch were involved in the study. The study found that all 7 functionality blocks of social media functioned well in social media for learning. The seven functionality blocks were identity, conversations, sharing, presence, relationships, reputation, and groups.

Introduction

The emergence of social media in the past few years has gain high attention of Internet users. This can be seen in the significant growth of the social media users worldwide in recent years which has transformed the ways the Internet users experience [1]. This led to social media to become the latest trend of communication in this digital age. The platforms are accessible and user friendly and the usage has been leveraged effectively [2]. This changes the communications landscape in the digital age [3] in which it has transformed the landscape of information access and dissemination online [4].

To catch up with the rapid growth of Internet technology, higher education institutions started to explore it significant for blended learning at higher education [4]. This resulted in progressively change in the teaching and learning environment where more educators and students are involved. [3,5,]. More students at higher education started to use social media platforms as it became popular [7]. Studies found that social media has significantly impacted teaching and learning process [3,7].

In Universiti Teknologi MARA, social media platforms are used as the online component to support blended learning approach which employed both traditional face-to-face and online instructions. The university also practices Week Without Wall (WWW) at times where many lecturers are not available such as during university convocation week or attending conferences or forums overseas during the semester. This gives the flexibility for students to learn anywhere and anytime using any smart devices. The study was conducted to find out students’ acceptance of incorporating social media in their blended learning courses and explored the functionality of social media in higher education institutions in supporting blended learning courses.

Social Media in Learning

Social Media is defined as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content” [8, p.61].
In educational context, social media are platforms for social communication in which they are based on social constructivism theory. The theory stated that knowledge is constructed through collaborative activities in collaborative community [4]. Lam [8] revealed that online collaborative learning via social media platforms enhance new learning experiences.

The framework of social media in the study was based on social media framework proposed by Kietzmann et al. [10]. The framework is a honeycomb which comprises of seven functionality building blocks namely identity, conversations, sharing, presence, relationships, reputation, and groups as shown in Figure 1.

The first functionality block of social media is identity of users where users reveal their identity in the social media setting. This function has been used by many users for self-branding. Conversions block refers to the extent of communication with others social media users. Its main function is to facilitate conversations between individuals or group for different purposes. Sharing block allows users exchange, distribute, and receive content and share the news (p.245). Presence block represents the accessibility of other users in virtual or real world. The function allows connectivity of mobile people between the real and virtual. The relationships function enables users to have multiple connections network. This function engages other users and increases the influence of the members in the network which reduce the degrees of separation of individuals. Reputation block allows users to identify their standing. Beside this, reputation also refers to content reputation. The next functional social media block is groups. This function enables users to form virtual communities and subcommunities. The members are allowed to join and also leave the group in the social media setting.

Social media is part of the tools used in blended learning [11]. Social media consist of various communication tools [4]. Literature has shared the use of social media for interaction, conversation and sharing [12]. In education, social media are found to be impactful in communication [13, 14], collaborative [14], creative expressions [14], conversation, sharing [15], publishing and participation [15]. Beside this, students use social media for entertainment as well [6].

Raut and Patil [6] shared that social media helped students acquired knowledge and build relationship with others. The online communities gathered people with common interests where the network offered to develop leadership skills from different levels. The networking platforms in social media encouraged the linkage between students where they shared and expressed their creativity. These interactions created and sustained the sense of belonging and avoid students to be isolated. Beside this, the assortment of tools offered in the social media platforms allowed learners to mix and match to individual learning style and hence increase their performance.
Methodology

An exploratory study was used in the study. Respondents were students who attended blended learning courses where social media platforms were used to supplement their online learning during March–June 2018 semester at Universiti Teknologi MARA Sarawak. There were five courses (MAT133, STA104, STA408, MAT285, CSC138) offered by five programs using social media platform to support blended learning courses namely Bachelor of Science (Plantation Technology and Management, AT220), Diploma in Computer Science (CS110), Diploma in Accountancy (AC110), Diploma in Science (AS110) and Diploma in Civil Engineering (EC110). Census was used in the study. A survey questionnaire with 17 statements was used to collect data. The items comprised of open-ended items and closed-ended items to solicit information on the use of social media in learning. Data were collected via google form where the link of the questionnaire was disseminated via social media platforms to all respondents. Data were analyzed using descriptive statistics and qualitative data were coded based on the social media seven functionality building blocks proposed by Kietzmann et al. as shown in Figure 1.

Results and Discussions

There were 101 students who responded the survey. Among them, 62 (61.4%) were female and the other (38.6%) were male. The highest number of respondents (35 respondents, 33.7%) were from CS110 followed by AT220 (29 respondents, 28.7%), AC110 (24 respondents, 23.8%) and EC110 (12 respondents, 11.9%). AS120 had the least respondents (2 respondents, 2%).

On the average, the daily time spent for social media by the respondents ranges from less than 1 hour to 12 hours and above. Most of the respondents (40 respondents, 39.6%) spent from 3 to less than 6 hours per day. 25 of the respondents (24.8%) spent more than 6 hours but less than 12 hours. A few respondents (9 respondents, 8.9%) even spent more than 12 hours on social media per day. 24 of the respondents (23.8%) spent reasonable time, that was 1 to less than 3 hours on social media and only 3 of the respondents (3 %) spent less than 1 hour on social media. From the result, it could be concluded that students at higher learning institutions daily contact with others was via social media.

Time taken on social media notice by respondents were different. Most of the respondents (47 respondents, 46.5%) only responded to the social media notice when they were free to respond. 19 of them (8.8%) responded within 5 minutes, 17 of them (16.8%) responded immediately, 10 of the respondents (9.9%) responded within 1 hour, and 8 of the respondents (7.9%) only responded sometime. From the response time taken to social media notice, it could be concluded that most of the students (92.1%) were alert with what was going on in the social media sites and willing to participate. The result showed students at higher education institution willingness to interact and communicate with others via social media. The finding was consistent to Raut and Patil [7].

There were few social media platforms used by respondents during March to June 2018 semester for their blended learning course. WhatsApp appeared to be the most favourite platform (91 respondents, 90.1%) for respondents. This was followed by Pinterest where 34 of the respondents (33.7%) used this platform. 31 of the respondents (30.7%) used Facebook platform. Others platform used were Twitter (15 respondents, 14.9%), Google+ (13 respondents, 12.9%), YouTube (8 respondents, 7.9%) and Dropbox (6 respondents, 5.9%). Two of the platforms, Instagram (3%) and Telegram (1%) were used by less than 5% of the respondents. Two of the most used social media platforms, Facebook and WhatsApp were consistent to Ali et al. [4] findings.

The three most preferred social media platform for learning were WhatsApp (28 respondents, 27.7%), Facebook (21 respondents, 20.8%) and Pinterest (18 respondents, 17.8%). The findings showed that social media consist of various communication tools for students to use [4].

Social media was used for different purposes to assist learning. Most of the respondents (88 respondents, 87.1%) used social media platform to share notes, 82 of the respondents (81.2%) shared learning materials and 81 of them (80.2%) shared information. Others included group announcement (74 respondents, 73.3%), gave opinion (70 respondents, 69.3%) and suggested solutions (68...
respondents, 67.3%). The three least used features in the social media platform were news (47 respondents, 46.5%), joke (336 respondents, 5.6) and homework announcement (1 respondent, 1%). The findings supported the findings of Murphy et al. [12], Al-rahimi et al. [16], Chai-lee [15], and Raut & Patil [7].

99 of the respondents (98%) perceived that social media was useful for learning. Only 2% of the respondents disagreed with the statement. 97 of the respondents (96%) agreed to continue using social media platform in learning in the following semester and only 4% did not agreed. The findings showed that social media was popular among students of higher education institution as mentioned by Elkaseh [8].

Table 1 summarized the social media honeycomb functional blocks use for learning at higher education institution. All 7 functionality blocks of social media suggested by Kietzmann et al. [10], were related to social media for learning at higher education institution. The highest contribution of social media for learning was sharing. Students shared their learning materials via social media platforms. The reasons given by students were convenient, fast response from others and able to complete their tasks faster.

Table 1. Functionality of social media for learning at higher education institution.

| Functionality Block | No | Keyword of assertion from Respondents |
|---------------------|----|----------------------------------------|
| Identity            | 15 | be member, install and join, create account |
| Sharing             | 30 | Share materials / notes / video, Exchange idea, Distribute / send learning material, Receive documents, Can download note / documents / video, Upload materials / note / video, Post questions / message, Save learning materials / files, Forward information, Discuss assignment / group work, Discussion, access the learning materials / files, give input to friend /s, give information, Exchange idea, Get answer / idea / feedback /, Send file / document / note, Access note / learning materials / information |
| Relationships       | 31 | Friend, Learning purpose, Collaboration between members |
| Presence            | 30 | connect anywhere, connect everywhere, connect anytime, Connect to people, Convenient to contact, Real time communication, Live session, Always online, Available 24 hours, Get immediate respond / feedback |
| Conservations       | 57 | Response to message / questions, Comment on the post / suggestion, Direct message, Communicate with lecturers / others students, Reply, Looking for people, Talk to people online, Ask questions, Attend discussion |
| Reputation          | 11 | number of posts, can get famous, post many contents |
| Groups              | 58 | Form group, Anyone can join, A lot of people, Meeting, can video call more than one people |

Conclusion

The advancement of technology has changed the communication and collaboration practices in the digital age. The study confirmed the students at higher education institution are social media savvy.
They are willing to use social media platforms in learning which support the blended learning courses offered by higher education institution. The study also matched the functionality blocks of social media for learning and found that three functionality blocks, sharing, groups and conservation contributed the most for learning.

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