

The Impact of Social Media use on Academic Performance among university students: A Pilot Study

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Abstract — There is no doubt that Social media has gained wider acceptability and usability and is also becoming probably the most important communication tools among students especially at the higher level of educational pursuit. As much as social media is viewed as having bridged the gap in communication that existed. Within the social media Facebook, Twitter and others are now gaining more and more patronage. These websites and social forums are way of communicating directly with other people socially. Social media has the potentials of influencing decision-making in a very short time regardless of the distance. On the bases of its influence, benefits and demerits this study is carried out in order to highlight the potentials of social media in the academic setting by collaborative learning and improve the students' academic performance. The results show that collaborative learning positively and significantly with interactive with peers, interactive with teachers and engagement which impact the students' academic performance.

Keywords –social media usage, collaborative learning, higher education and students' academic performance.

1. INTRODUCTION

The social media has become one of the most important communication means in recent times. However, social networking exist so as to provide communication among people regardless of the distance, making it open to people easily share information, files and pictures and videos, create blogs and send messages, and conduct real-time conversations. These systems are referred to as social, simply because they allow communication with buddies and co-workers so easily and effectively. It also strengthens the ties between people of those systems. The favorite in the realm of internet sites are Facebook, Twitter and others. These websites and social forums are way of communication directly with other people socially and in media. They are playing a large and influential role decision-making in the occasions from the global world economically, politically, socially and educationally.

The driving factors for adoption of social media are the progressively ubiquitous access, convenience, functionality, and flexibility of social technologies [1&2]. It has been contended that, poor greater education, social technologies supports social constructivist techniques to learning they potentially have to improve students' construction of understanding and promote student interaction [3, 2&4]. An additional benefit of social technologies provided on the internet is that they are frequently free or require marginal investment, eliminating a potential barrier to adoption [1].

There has been various overview and opinions which recognized four major advantages of social media use in higher education. These include, enhancing relationship, improving learning motivation, offering personalized course material, and developing collaborative abilities [5&6]. This means that social networking activities have the possibility of enhancing student contact and is used to improve their participation in class, particularly where introverted students are involved. Students can function in online group learning, with less or no anxiety of needing to raise questions before peers at school [5].

2. LITERATURE REVIEW

Earlier studies, such as [7] examined the general usability of social media among young students in higher level of education. Similarly, [8&9] examined the use of social media and maintain that, the appropriation of social technologies is not an easy and straightforward process. At higher level of education more complex academic tasks are handled and the new generation of students is perceived to understand that social media and social technologies are influential to learning. A number of earlier studies have shown evidence that efforts are required in order to start using social media in order to influence educational activities. However, the whole process of adopting a particular social

media has not received adequate attention from researchers [10].

Researchers have argued that in teaching and learning the integration of media to facilitate the process is widely encouraged especially in relation to improving final results of scholars [11&12]. According to [12] students ought to be given careful scrutiny to check their use of the tools they feel at ease and acquainted with which they feel are viable in accomplishing academic tasks. In connection with this, the social affordances of utilizing social networking may not be provided in a single particular social technology but instead within the mixture of several social technologies.

Previous literature recognized the challenges that are connected with using social media in higher education. [13] Carried out an empirical study of social networking usability among University students in the United Kingdom. The study involved 76 participants for the questionnaire and 14 granted interviews. The study discovered that, there are 5 major challenges of social networking and its relation to learning such as studying originality and copyright issues feeling of information constraint. Teachers sometimes are not up-to-date and could not understand how to integrate and take advantage of social software into their classes. The findings of the study confirmed the earlier issues outlined by [14] according to their next generation research in three Australian Universities.

According to [14] enumerated six issues surrounding pedagogy in terms of technology integration. These issues include: student learning diversity, equity and use of technology curriculum and assessment academic integrity staff development and capacity building, and finally, ICT infrastructure. Regardless of the benefits and challenges recognized, the study further revealed that teachers that do not belong to the new generation are skeptical to social network integration in class. Teachers are encouraged to be conscious in their appropriation and employ of social networking regarding focus on the different students' learning preference.

Additionally, the scholars should choose we've got the technology that meets their career. The class experience can't be satisfied their understanding, but additionally they ought to also use the understanding in tangible existence of working. The idea of discussing understanding and cooperative learning through the social networking like Facebook, Talking, E-mail and Website or any types of learning assets that let the students in understanding and experience discussing between your students, coach, experts, officials or even the business proprietor can help the scholars in hooking up the lesson learned towards the context in tangible existence of working. The significance of individuals all reasons pointed out, the investigator has inspiration to create a conceptual framework of Social networking to aid Collaborative Learning (SSCL) for improving understanding construction [15].

2.1 Social Media for Academic Purpose

Using social media by University students is certainly a fascinating portion of research for educationists and social scientists. [16] Maintain that in the available literature there are beneficial designs and styles of employing it at school level. It describes the introduction of contents and focuses on how to share, interact, and collaborate and socialize by its use. There appear different top reasons to justify using social media in greater education. It usage was confirmed by preserve setup its familiar with enhance study encounters of students by provision of e-support services on their behalf [17]. It's familiar with facilitate communication among and between students in virtual cities. Amongst others, the Facebook appears being most likely probably the most favorite was suggested as a means of communication for reaching students [18].

Internet sites focus heavily on building online metropolitan areas certain to along with common interests or activities. Therefore give them tools that help them to make this happen. Within the portion of collaborative learning, the internet sites handled the large problem elevated by teachers within the recent period. For instance, insufficiencies in humanitarian aspect and recognized to it teaching lacks spirit. However, Websites have assisted to solve a few individuals' problems, with the aid of interactive affiliate by getting a person, making the participation within the human consider the academic process something important. That introduced with an increase to attract people toward collaborative learning and many researchers within the aspects of social sciences undertaking studies to look at this phenomenon and to clarify the actual reason behind the attraction educated about internet sites for example [19&20].

Furthermore, instructors have reported that using online technologies can encourage online discussion among students outside the classes, beyond the traditional class setting [21] Inside the situation of internet sites or blogs, when students update their user profiles and personalize their unique pages, they could provide comprehensive particulars about themselves (e.g., full title, date of birth, address, educational background, and hobbies). The academics that are using such technologies inside their class will have a way to discover much more about the students they train simply by viewing the students' profiles [22]. Consequently of the, instructors can personalize this program material using the students' profiles [23]

Some social media such as Wikipedia and to some extent blogs encourage investigative-based and collaborative activities among students in higher education. This open access for active participation and can therefore create opportunities for effective learning. Linked with this principle of collaborative development among learners, social

media enable learners and teachers to share and publish information as a result of the learning activity (e.g., course materials such as course syllabus, course notes, assignments, test cases, etc) and invite feedback from peers. By publishing and presenting their work to a wide audience through blogs, wikis, or podcasts, learners benefit from the opportunity to appropriate new ideas, and transform their own understanding through reflection [24].

Students especially at higher level of learning can function collaboratively through exploring the opportunities given by online social atmosphere to resolve certain academic issues or issues with their peers [25&26] This is indicative that through collaborative or team learning through integration of social media, students can establish positive contact, using the goal of working towards particular final results, both in offline and online modes [27].

According to [28] created a social media site for college kids, striving at improving both collaborative study and social interaction. Their research uncovers that creating social networking tools as part of traditional learning will attract students and may motivate their participation within the learning process. In other similar studies, a social bookmark posting tool [29], a blogging service [30], or wiki software [31] are really acquainted with engaging students in collaborative projects and encourages creating, editing, and speaking about content. The study ensures that, it's promising to consider social networking learning because it encourages collective understanding generation and encourages active user participation. However, using social networking to boost learning solutions remains at the earlier phase and really should be further investigated.

Social Media to assist Collaborative Learning (SSCL) might be the pc network found in learning atmosphere for encouraging the students in learning process and cooperates in groups with the group process, communication involving the students, experts and workplace entrepreneurs. The understanding and experience is viewed since the tools for understanding construction that's precise and matches the particular context in solid existence [15].

2.2 Effects of social media on the Academic Performance of Students

The social media engages students and have to be examined as entrepreneurs of understanding. The medium of internet is marketing with increase in its programs. The interactive character of online conditions has extended with social networking. Hooking up through social networking began as being a niche activity, though time it's a phenomenon. The web sites are employed in many ways like developing metropolitan areas, speaking, blogging etc. Additionally different institutions even nowadays are developing groups on several Websites [32].

The improved usage of Websites has become a worldwide phenomenon for quite some time. What began out as being a hobby for several computer literate people has converted to a social norm and existence-style for individuals from around the globe [33]. Teens and teenagers have especially recognized these internet sites to be able to contact their peers, share information, reinvent their personas, and showcase their social lives [33]. While using the increase of technology helpful for getting together with others along with the recognition on the internet, Internet sites are now being an activity that's done mainly on the web, with Websites [34].

According to [35] Facebook users often time experience poor performance academically. Similarly, [36] posit that social media is negatively associated with academic performance of student and is a lot more momentous than its advantages. Internet addiction consequently gave rise in internet usage within the last couple of decades. [37] recommended that addicted users prefer using internet setting back their personal and professional responsibilities which ultimately leads to poor academic performance.

According to [38] pointed out that Facebook users devoted lesser time to their studies in comparison to nonusers did and subsequently had lower GPAs. [39] Also mentioned that among various unique distractions of every single generation, Facebook remains a major distraction of current generation. According to [40] impairment of educational performance and internet dependency are correlated by utilizing synchronous communication programs including internet sites and forums.

There are benefits and risks associated with using any social network. There have been reports regarding its effect on students' academic performance. Some researchers investigated the end result of social networking usability among College students' and with their academic performance. They found a poor effect and influence when the media is overuse in such a way that do not academically improve learning or its process [41, 42, 43, 39 and 44] Other researchers examined this same problem but found either no significant relationship between using social networking and student academic performance [45&46], or really a factor in students' academic performance [47].

3. RESEARCH METHOD

The data for this study was collected by way of a survey questionnaire administered on 80 Undergraduate and postgraduate students during the 2012/2013 academic session. The age-range of the respondents was between 18 to 36. The sample consisted of 31 males and 49 females. Students were instructed in the survey to offer information about their experiences and impact of using social media on academic performance through collaborative learning. A quantitative approach and give the students the questionnaire in UTM library was used to draw the data for the study.

3.1 Respondents

In this research 80 set of questionnaires was randomly distributed to Undergraduate and postgraduate students of the Universiti Teknologi Malaysia. SPSS application (Version-20) was used to analyze the data. The instrument used for this study was designed based on the objectives of the study. It was piloted and the Cronbach's alpha of the reliability and validity of the instrument was put at .857. This is acceptable and the instrument has met the reliability requirement for the study. The questions which are easy to understand and the answers were divided into five sections to make it clearer.

3.2 Data Collection Procedures

A five-point Likert scale (1 for strongly disagree to 5 strongly agree) was applied in this study. The questionnaire was fine-tuned with reference to a pilot study carried out with students, and tested before-hand, examines the students' opinions about the use of social media on academic performance through collaborative learning in Malaysian higher education. A questionnaire consisting of 20 items was designed, following minor revisions to the layout, the survey was administered at the end of the semester (July, 2013). Each participant was provided with a questionnaire and a brief background to the study.

The table on appendix shows the 20 items used to measure the constructs included in our framework. Interactivity with peers and the teacher was measured using a subset of four items from [48&49] Engagement was measured using three items adapted from [50&51]. Collaborative learning was measured using four items adapted from, [52] and finally, students' academic performance was measured using six items from, [53].

3.3 Conceptual framework

This study purpose for a brief discussion on the contents in the suggested framework for The Impact of Social Media use on Academic Performance among university students through collaborative learning in greater education at Universiti Teknologi Malaysia. However, this research finds that social media integration relates to the students' academic performance, the variables observed to be used of social media, in this study are: Interaction with peers, Interaction with teacher and Engagement. Influence students' academic performance through collaborative learning "mediator" because the dependent variable, are the students' perception as the independent variable.

Similarly, a conceptual framework that identifies instruments by which using social media influences students' academic performance through collaborative learning is supplied (see Fig. 1). We suggest that student awareness from the interaction with peers, interaction using the teacher, engagement, simplicity of use that derive from using of social media promote active collaborative learning and, which ultimately results in enhanced students' academic performance.

Social media increases the quality of perceived interaction within the class both among students interaction with peers and between students and also the teacher interaction [54]. Interaction is created like a critical aspect in the training process. It encourages students to have fun playing the class active collaborative learning [53], and also to create a sustained behavior participation in mastering activities the engagement [55]. The existence of these components is instrumental in improving collaborative learning and students' academic performance.

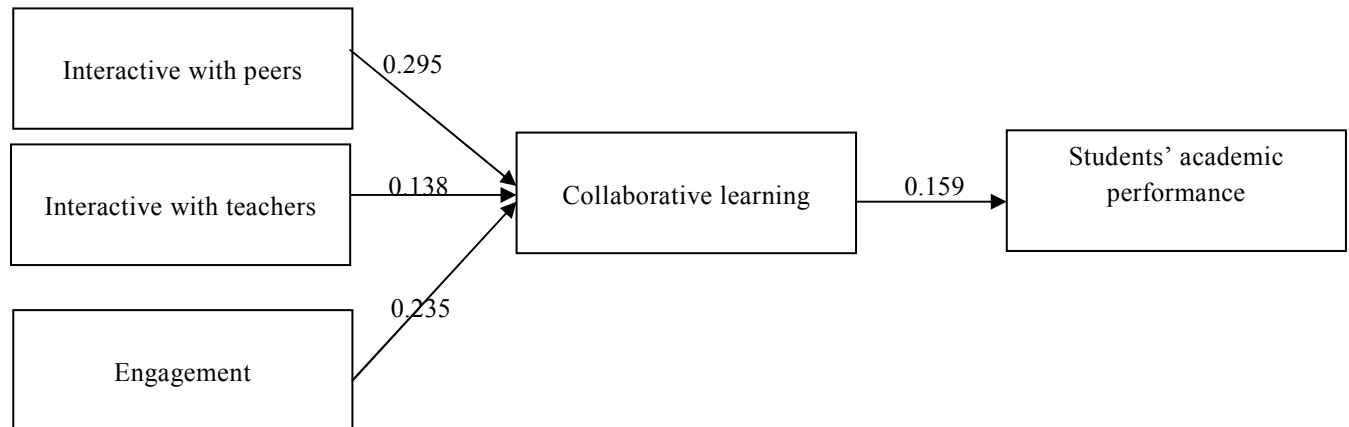


FIGURE 1: Conceptual framework

4. RESULT AND DISCUSSION

The relationship between the student academic performance (SAP) with interactivity with peers (INT_P), interactivity with the teacher (INT_T), engagement (ENG) and collaborative learning (CL) were analyzed. Table 1 shows the Pearson correlation coefficient at 99 % confidence level. The best correlation was found between the student academic performances (SAP) with engagement (ENG) with correlation coefficient of 0.679. The letters INT-P stand for interactivity with peers, letters INT-T stand for interactivity with the teachers, letters ENG engagement, letters CL collaborative learning and letters SAP students' academic performance.

Result of Pearson correlation shows that there is statistically significant positive relationship between interactivity with the teachers and interactivity with peers ($r = 0.573$, $P < 0.01$). Results demonstrate that relationship between these two construct is moderate and interactivity with the teachers and interactivity with peer's combination contributing moderately towards students' academic performance. Engagement correlation results with interactivity with peers ($r = 0.463$, $P < 0.01$) demonstrate moderate positive relationship, while engagement results with interactivity with the teachers ($r = 0.625$, $P < 0.01$) demonstrate positive relationship showing that these two construct are contributing moderately towards students' academic performance. Similarly, construct of collaborative learning correlation results with interactivity with peers ($r = .496$, $P < 0.10$), interactivity with the teachers ($r = .543$, $P < 0.10$) and engagement ($r = 0.528$, $P < 0.10$) demonstrate positive and significant relationship. These results highlight that collaborative learning relationship with interactivity with peers, interactivity with the teachers and the engagement, is contributing towards students' academic performance.

TABLE 1: Descriptive statistics and correlations at 99 % confidence level

	INT_P	INT_T	ENG	CL	SAP
INT_P	1				
INT_T	.573**	1			
ENG	.463**	.625**	1		
CL	.496**	.543**	.528**	1	
SAP	.597**	.566**	.679**	.555**	1

** . Correlation is significant at the 0.01 level (2-tailed).

While the dependent variable students' academic performance has positive and significant correlation with collaborative learning ($r = 0.555$, $P < 0.01$) and positive correlation with collaborative learning. Correlation results of students' academic performance with interactivity with peers ($r = 0.597$, $P < 0.01$); interactivity with the teachers ($r = 0.566$, $P < 0.01$); engagement ($r = 0.679$, $P < 0.01$) so the positive and significant correlation with engagement. These results

highlight that students' academic performance relationship with interactivity with peers, interactivity with the teachers and the engagement, is contributing to improve students' academic performance.

The table 2 indicate that interactivity with peers positively and significantly with collaborative learning ($\beta_2 = 0.295$, $p < 0.05$) While support the interaction among the students may improve the students' academic performance through the collaborative learning. Interactivity with teachers positively and significantly with collaborative learning was ($\beta_3 = 0.138$, $p < 0.05$). The interaction between students and teachers found to be lower than interactivity with peers. The engagement also has positively and significantly with collaborative learning with standardized beta coefficients of 0.235. The standardized beta coefficient between the collaborative learning and students' academic performance found to be a positively and significantly with value of 0.159 at significant level less than 0.05.

In line with the outcome of this study to understand students' academic performance by using social media in higher education, the following have been discovered: To acquire a general satisfaction of social media since it encourages and facilitates student utilization of social media for collaborative learning, and boost the education and experience with a students. In terms of interactivity with peers on social media and acquired a higher percentage when it comes to students' academic performance at University since it influences it to be simple for student to go over questions along with other students through social media It is easy to networking with peers and interact with them because it is the same age ,class and education level.

In terms of the students' academic performance with engagement acquired a typical percentage when it comes to academic performance of students at University since it provides coalition and sharing of knowledge in the class and library by using of social media any time. The collaborative learning with social media usage and acquired a average percentage when it comes to academic performance of students at University. Since it helps make the students feel confident enough to presenting the social media by collaborative between peers, teachers and engagement within the class. Finally, In terms of the students' academic performance with interactivity with teachers of utilizing social media and acquired a Lowest percentage sometimes not allowed to communicate with teachers or shy students , but are good since it provides those more understanding form teachers, and academic achievement in education.

TABLE 2: The standardized beta coefficients

Coefficients ^a			
Framework	Standardized Coefficients	t	Sig.
	Beta		
CL (β_1)	.159	2.135	.026
INT_P (β_2)	.295	2.119	.041
INT_T (β_3)	.138	2.446	.081
ENG (β_4)	.235	2.961	.005
a. Dependent Variable: student academic performance (SAP)			
b. Predictors: (Constant), collaborative learning (CL)			
c. Predictors: (Constant), collaborative learning (CL), interactivity with peers (INT_P), interactivity with the teacher (INT_T), engagement (ENG).			

5. CONCLUSION AND FUTURE WORK

in this study suggested three predictors of using social media for improve students' academic performance by collaborative learning among students they are as follows with interactivity with peers, interactivity with the teacher and engagement .In the results acquired, it may be concluded that social media facilitates the academic experience with the majority of the participants but need to control and manage their time. Unless will affect the use of social media negatively on the academic performance of students. We propose for future work more studies and addition of factors have an effect

with collaborative learning to improve students' academic performance and taking into account demographic factors, a larger sample to clarify more and Find more elements to measure the the factors that affect a student's academic performance through collaborative learning in higher education institutions this is in our search in the future.

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APPENDIX:

Interactivity with peers (INT-P)

INT-P1 Using the social media in class facilitates interaction with peers.

INT-P2 Using the social media in class gives me the opportunity to discuss with peers.

INT-P3 Using the social media in class facilitates dialog with peers.

INT-P4 Using the social media in class allows the exchange of information with peers.

Interactivity with teachers (INT-T)

INT-T1 Using the social media in class facilitates interaction with the teacher.

INT-T2 Using the social media in class gives me the opportunity to discuss with the teacher.

INT-T3 Using the social media in class facilitates dialog with the teacher.

INT-T4 Using the social media in class allows the exchange of information with the teacher.

Engagement (ENG)

ENG 1 By using the social media this class has favored my personal relationships with my peers and teachers.

ENG 2 By using the social media In this class, my peer and faculty interactions made me feel valuable.

ENG 3 By using the social media I felt that my opinions have been taken into account in this class.

Using social media for collaborative learning (CL)

CL 1 I felt that using social media for collaborative learning in my group was effective.

CL 2 I was able to develop research skills through peer collaboration.

CL 3 I was able to develop new skills and knowledge from other members in my group.

CL 4 Collaborative learning experience in the social media environment is better than in a face-to-face learning environment.

Students' academic performance (SAP)

SAP 1 Using of social media to facilitate academic activities and coordinate with peers.

SAP 2 Using of social media to facilitate academic activities and coordinate with teachers.

SAP 3 Group discussions can be arranged with my classmates using of social media and this will improve my academic performance.

SAP 4 Using of social media to build a student-lecturer relationship with my lecturers and this improves my academic performance.

SAP 5 Using of social media improves my interaction with classmates and lecturers, thus, help me to improve my academic performance.

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