The need of incorporating Cidos with Facebook to facilitate online collaborative learning

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Abstract

Getting a job after completing college is always a challenge for students; even though they acquired an excellent academic skill. Therefore, the role of Higher Education Institutions is to provide training to the students with the soft skills in accordance with the demands of the job. Collaborative learning has been well known in the educational arena with proven results in terms of developing soft skills. This study aims to explore the need of incorporating Moodle with Social Network Sites to facilitate online collaborative learning. In order to obtain data for this preliminary study, two sets of questionnaire were personally distributed to 356 diploma students and 145 lecturers from Politeknik Ibrahim Sultan, Politeknik Merlimau, Politeknik Tuanku Syed Sirajuddin, Politeknik Kota Kinabalu, and Politeknik Sultan Idris Shah. All collected data had been analyzed using SPPS 19 software and the results of the study showed lecturers have to apply certain instrument to record and monitor student discussion and to assess student contribution from the discussion. But most of lecturers and students tend to access their Social Network Sites accounts daily compares to Cidos. Incorporating Cidos with Facebook to support online collaborative learning as recommendations for future research is suggested.

Keywords: online collaborative learning (OCL), learning management system (LMS), social network sites (SNSs).

1 Introduction

Having excellent academic skills still does not guarantee a graduated person to get a job due to the stiff competition in the career market today. Now, the academic achievement is not the primary criteria for getting a job but most employers are looking for good soft skills as one of the selection criteria for choosing the employee.Universities around the world will be increasingly needed to produce highly skilled graduates that meet the needs of employers [1]. Employability 2012 data which are obtained from the Department of Malaysia Polytechnic shows only 46.64% of former students are employed and only 15.7% of students manage to get jobs according to their respective fields.Moreover, the feedback collected from industry shows that Malaysia polytechnic students do not meet the level of competency and working attitude expected by the industries [2].

The benefits of collaboration in learning have been proven by Social Constructivism [3]. Research by Ref. [4] shows that collaborative learning promotes the development of soft skills. Collaborative learning, in which the online environment refers to instructional activities for getting students to work together online to achieve common educational goals. But, in online collaborative learning(OCL), it is difficult for educators to monitor and evaluate students' participation in group project [5]. Therefore, certain strategies must be applied to monitor the learning process.

Nowadays most educational institution are adopting Learning Management System (LMS) to centralize contents, learning, and assessment activities in one learning environment [6, 7].Students are able to use the features inside the LMS such as a discussion board or forum to facilitate their communication and collaborative work in this learning environment. However, Ref. [8] reported that the frequency of using the LMS provided by the educational institution is very low and it becomes unpopular among educators. Research which is conducted by Ref. [9] reported that the reason of Higher Education Institutions (HEIs) still using LMS in teaching are because of the course content facilities and use other application to facilitate communication. Therefore, it looks like LMS is in need of the next stage of development: the integration of social and collaborative tools to enhance the learning process.

Learning through Social Network Sites (SNSs) is a trending topic nowadays, since many studies reported that students spend more time online in SNSs[10]. Studies have shown that SNSs enable interaction, collaboration, resource sharing, active participation, and critical thinking in educational activities [11–14].Even though many researchers in the education field have looked into the potential of adapting SNSs in their teaching and learning process [8, 15, 16], there are few studies on the integration of conventional LMS such as Moodle with SNSs. This has left a gap in the body of knowledge on how LMS can be integrated with the SNSs platform to effectively facilitate learning especially in an OCL environment. Therefore, the researcher aims to incorporate LMS and SNSs to support OCL. Discussion and future research are provided based on the findings of this study.

2 Materials and methods

The study was conducted in the form of descriptive survey study. According to Cohen and Manion in Ref. [17], the survey is utilized to take the data at a certain time, often by using questionnaires. Therefore, researchers had choosen to distribute a set of questionnaires to each respondent to obtain the feedback easily. The purpose of the survey was to gather information about the need of incorporating Moodle with SNSs to facilitate online collaborative learning for Malaysia Polytechnic. Two sets of questionnaire were used in this study; one was for students and one for lecturers. Lecturer's questionnaire consists 23 questions and student's questionnaire consists 19 questions. The questionnaire was constructed and modified based on the questionnaires used by Refs. [18, 19].The questionnaires were personally administered to respondents from Politeknik Ibrahim Sultan, Politeknik Merlimau, Politeknik Tuanku Syed Sirajuddin, Politeknik Kota Kinabalu, and Politeknik Sultan Idris Shah. The respondents were randomly selected in order to collect information for this research. The questionnaires were dstributed to 356 diploma students and 145 lecturers. SPSS 19.0 software was used to analyze all collected data.

3 Findings

This section presents the findings to discover the need of incorporating Cidos with Social Network Sites to facilitate Online Collaborative Learning. Therefore, only the items that relevant to the focused are presented in this section. In this study, reliability test has been performed and Cronbach α values were 0.653 for student's questionnaire and 0.870 for lecturer's questionnaire.Ref. [17] indicates that a questionnaire has high reliability if the Cronbach α is above 0.80 but Ref. [20] has indicated 0.6 to be an acceptable reliability coefficient for preliminary analysis. Therefore, it can be concluded that the internal consistency of the data was achieved.

   As shown in Table 1, it is clear that 78.6% of lecturers implemented collaborative learning strategy in their class.Table 2 shows that 65.5% of lecturers evaluate their collaborative activity, but only 35.9% of lecturers assessed their students' projects based on output and student contribution. 35.9% of lecturers measured only the output and another 33.1% of lecturers did not measure anything (Table 3).

   From student's questionnaire shows that 62.9% of the respondents agreed and 10.4% of the respondents strongly agreed with the statement that lecturers only

Table 1: Implement Collaborative Strategy in Class.

Valid	Frequency	Percent
Yes	114	78.6
No	31	21.4
Total	145	100

Table 2: Evaluate CL Process.

Valid	Frequency	Percent
Yes	95	65.5
No	50	34.5
Total	145	100

Table 3: Measuring Strategy.

Valid	Frequency	Percent
Do not assess anything	48	33.1
Assess only the end product	52	35.9
Assess product and contribution	45	31
Total	145	100

Table 4: Lecturers Only Evaluated the Output.

Valid	Frequency	Percent
Strongly disagree	20	5.6
Disagree	75	21.1
Agree	224	62.9
Strongly agree	37	10.4
Total	356	100

Table 5: It is Unfair for All Members to Get the Same Marks.

Valid	Frequency	Percent
Strongly disagree	21	5.9
Disagree	24	6.7
Agree	142	39.9
Strongly agree	169	47.5
Total	356	100

evaluated the output and the respondents will get equal marks in their group (refer to Table 4). Table 5 shows 47.5% of the respondents strongly agreed and another 39.9% of the respondents agreed with the statement "It is unfair for all members to get same marks."

For the trends of Cidos's tool usage, Table 6 shows that the least used features by lecturer are Forum (62.1%), Bookmarking (66.2%), and Gradebook (69.0%). On the other hand, the three main Cidos tools most frequently used by lecturers are E-mail (93.1%), Content Sharing (86.9%),and Portfolio (84.8%).

As shown by Table 7, Social Networking such as Facebook, MySpace, and Twitter are the most commonly used alternative application by lecturers to complement the LMS provided by their institutions (44.1%) followed by Photo/Video Sharing (22%), Content Sharing (26.2%), Communication (17.2%), Blogs (15.2%), and Collaboration (14.5%).

Table 6: Cidos's Tool Usage by Lecturer.

Cidos Tools	Frequency	Percent
Forum	301	62.1
Bookmarking	307	66.2
Gradebook	311	69.0
Scheduler	317	73.1
Enrollment	326	79.3
Group work	328	80.7
Quiz	331	82.8
Assignment	333	84.1
Portfolio	334	84.8
Content Sharing	337	86.9
E-mail	346	93.1

Table 7: Other Application did Lecturer Use for Teaching and Learning Session.

Valid	Frequency	Percent
Social networking	64	44.1
Photo/video Sharing	42	29.0
Content sharing	38	26.2
Communication	25	17.2
Blogs	22	15.2
Collaboration	21	14.5

Table 8: Frequency of Access SNSs and Cidos Per Day.

	Cidos		SNSs	
	Frequency	Percent	Frequency	Percent
Lecturer	14	9.6	133	91.7
Student	36	10.1	351	98.6

Based on data which are presented in Table 8, the analysis shows that a majority (97.5%) of lecturers access their SNSs accounts daily compares to Cidos (7.3%). Meanwhile, a majority (97.5%) of students access their SNSs accounts daily compares to Cidos (6%).

Tables 9 and 10 show the percentage of SNSs based on lecturers' and students' preferences. The most preferred SNSs by the lecturer is Facebook (91.0%), followed by Twitter (9.0%), MySpace (4.1%), LinkedIn (2.1%), and Pinterest and Other, both at 1.4%.Meanwhile, the most preferred SNSs by the student is Facebook (93.3%), followed by Twitter (42.1%), MySpace (6.2%), Pinterest (0.8%), LinkedIn (0.3%),and Other (0%).

Table 9: SNSs Based on Lecturer Preferences.

Valid	Frequency	Percent
Other	2	1.4
Pinterest	2	1.4
LinkedIn	3	2.1
MySpace	6	4.1
Twitter	13	9.0
Facebook	132	91.0
Total	145	100.0

Table 10: SNSs Based on Student Preferences.

Valid	Frequency	Percent
Other	0	0.0
LinkedIn	1	0.3
Pinterest	3	0.8
MySpace	22	6.2
Twitter	150	42.1
Facebook	332	93.3
Total	356	100.0

4 Discussion and conclusion

According to Ref. [21], to establish and maintain an active collaboration is a challenging task due to the lack of low participation of other group members to participate actively in their group work. Educators are not able to assume that every student makes an equal contribution to the group work and then allocate the same marks to all members [22]. Therefore, educators must allocate marks based on student's contribution to encourage student participation actively in their group work activity [23]. Education research provides the same evidence on how to increase willingness to work collaboratively [24]. Therefore, lecturers had to apply reliable instrument to record and monitor student's discussion topic and to assess student's contribution from the discussion.

Most educational institutions have implemented LMS to centralize their contents, learning, and assessment activities in one single learning environment. Educators and learners have fully utilized the forum and discussion boards to facilitate their communication and collaboration works. However, from the results, it was found that the lecturers preferred to employ Social Network Sites to facilitate their communication rather than using Cidos. This result has showed that there are weaknesses by implementing LMS in the field of communication and collaboration among users. Moreover, this result is similar to the result of Ref. [10]. The authors are using other applications as alternative of replacement

for a built-in discussion forum in LMS. However, this is different from the result reported by Ref. [24], who believe that the SNSs may cause distraction to the students, especially the newly enrolled students. Therefore, the researcher of this present study agrees with Refs. [18, 25] that the existing LMS should be upgraded with social network function.

Recent studies have reported how Facebook can be used to enhance the learning process [26] and to enhance learning collaboration activities [10, 27]. In contrast with the findings by Ref. [28], Facebook simply cannot be successful in meeting the needs of the students; it can only be used as a supplement due to the incapability and limitations of the LMS such as in networking and communication. The findings from the survey in this present study has indicated that majority of students and lecturers have their own SNSs account, and most of the respondents are Facebook subscribers. Ref. [29] finds that students prefer to use tool that they are familiar with. Therefore, to facilitate Online Collaborative Learning, the reasearcher imply to upgrade the existing Learning Management System with Facebook.On the next stand of this research, the researcher will determine the appropriate collaborative learning strategy based on lecturer and student preference.

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