

COMMUNICATION IN LEARNING MANAGEMENT SYSTEM (LMS): THE IMPACT ON STUDENT LEARNING SATISFACTION

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ABSTRACT

Learning Management System is one of the ICT software which essential to success the e-learning method for Higher education institution in Malaysia. Students as the larger users in Learning Management System, their satisfaction and perception are important to determine the effectiveness of the LMS that have been implemented. The research has focus about the communication of Learning Management System (LMS) where known as LearningZone in Universiti Utara Malaysia (UUM). The quantitative research method has been conducted. The data was collected from 100 respondents which focus in School of Technology and Logistic (STML) students. The result of this study will be used to achieve the objective with relevant variables. It is expected that this study will provide the student perception of satisfaction and provide contribution for LearningZone to improve existing LMS model indirectly.

Keywords

Student Learning Satisfaction, learning management system, LearningZone UUM, Communication.

1.0 INTRODUCTION

Nowadays, Information and Communication Technology (ICT) have widely involved in public and private higher learning institutions across the world through the digital environment. Tertiary institution or higher education institutions in Malaysia have tried to enhance the teaching and learning method to the digital era. As stated by Jowati (2013), the most important one was the National Higher Education Strategic Planning which was launched in 2007 which outlined e-learning as one of its Critical Agenda Projects

(CAPs). Therefore, ICT have played various important roles in Malaysia education field and develop rapidly to carry the responsibility to support student learning. A complete infrastructure of the ICT will be wasted if it is not utilized to the fullest capacity.

Learning Management System (LMS) is one of the ICT web based software that used for e-learning and the interaction between the instructors and students (Min et al., 2012). LMS normally involve in a big amount of users especially in education field which conduct many students and instructor. University Utara Malaysia (UUM) had implement web based LMS, Moodle since year 2000 and which known as LearningZone. It has been installed on the UUM University's web server. The objective of research is to investigate the utilization of LearningZone as communication medium among STML students and identify the level of satisfaction on communication through LearningZone among STML students.

2.0 LITERATURE REVIEW

Due to the rapidly improvement in Information and Communication Technology (ICT), ICT have be widely involve in all the higher education Institutions(HEIs) around the world. The advancement of ICT enables the instructors and the students or the learners to interact in a digital environment and forms a knowledge sharing environment. Embi (2011) also states that to ensure that the implementation of PSPTN is based on the set phases; MOHE has developed 21 Critical Agenda Projects (CAPs). Embi (2011) also states that to ensure that the implementation of PSPTN is based on the set phases; MOHE has developed 21 Critical Agenda Projects (CAPs). Hence, all the Higher Education Institutions (HEIs) in Malaysia need to follow the

implementation of PSPTN and conduct the CAPs. According to Lodge (2010), podcasts of lectures, learning management system, wiki, blogs, social networking and so on are all being implemented not only in distance education but now also finding extensive use in on-campus course throughout the world. Learning Management System (LMS) is one of the ICT web based that be facilitate for e-learning, distance learning, online learning and interaction between the users in the educational field. As stated by Raman & Don (2013), web-based LMS has become gradually more important in Malaysia higher education institutions.

2.1 Background of LMS

According to Embi (2011), Learning Management System (LMS) is an information system designed for the facilitation of management in online course. Lonn (2009) states that with their development, these system have been called as Course Management Systems (CMS), Virtual Learning Environment, Collaborative Learning Environment and other. Bhasin (2012) also states that the learning management system (LMS) cover the capability of technology to improve learning outcomes and to prepare students for the accelerated changes in the world. Yorulmaz, Yavuzcan & Togay (2012) also point that they provide a combination of functions that can be conduct with online, such as evaluation, communication, content submission, gathering students' assignments, student groups management, questionnaires, monitoring tools, wiki, blog, chat and discussion forum.

AlNomay, Jaber & AlNasser (2012) states that the functions of LMS are either building & presenting learning course including content and interaction in a supportive way to the traditional learning in classrooms or fully so as to dispense with traditional learning methods., Embi (2011) also point that the major factor that cause the implementation of LMS are famous are its relatively low cost and low level, basic user skills required to use it.

2.2 Category and the type of LMS

According to Embi (2011), LMS can be separate into two categories: proprietary and open source. As stated by Embi (2011), an example of a proprietary LMS is Blackboard, while Moodle is an example of an open source LMS system that is famous and widely used due to it is free and can

be modified. Lawler (2011) also make this point through the comparison to Blackboard, which need to have licensing payments for its proprietary software, Moodle is an "open source" LMS which means that it is free and available to download without license payments or other proprietary obligation. According to Juhary (2013), Moodle is rapidly becoming a dynamic LMS in Malaysia. This is supported by Embi (2011) who stated that a total of 12 HEIs are using Moodle, 2 HEIs are using Caroline and 6 HEIs purchased LMS from local vendors while 2 HEIs use Blackboard which uses a commercial LMS from overseas.

2.3 The role of Communication in LMS and Student Learning Satisfaction

Wang et al (2012) also reported that a number research studies have investigate that the use of Facebook increase student motivation, satisfaction, and classroom climate and student-faculty relationship. According to Lai (2011), the potential of digital technology determine by its capability for support a more interactive and communication process, and facilitates a participatory pedagogy by supporting one-to-many and many-to-many communications. According to Hamade (2012), Kuwait University's concern in offering high quality training and learning for its students using the most advanced communications technology led to using Blackboard Learning Management system. Similarity, Embi (2011) also points that the integration of e-Learning in practice is accepted by all HEIs as an effective means of communication.

Embi (2011) also point that main categories that received high responses include content sharing, photo/video sharing and social networking where this implication are clear to the HEIs that there should be efforts to integrate these facilities into existing LMS. Lai (2011) have states that these technology experiences may affect the way of student to socialize, communicate and learn. Rozac et al. (2012) claim that it appear obvious that the existing e-learning processes must be complemented with social networking tools. Similarity, Chew (2011) states that the interface design of the LMS could be made more similar to other social networking sites, for example: Facebook to enhance the usability of the system in assisting students in their learning.

The learning satisfaction of students in HEIs is very important to determine the successful of the implementation of LMS in HEIs. According to Chew (2011), satisfaction is adversely affected when a user experiences failure because of a slow response to a command or rigid navigational option force a certain linear progression through a course. Likewise, Malik (2009) have states that the beneficiary of E-L technology are the students, if they are not pleased then the chances of successful implementation of E-L environment is not possible. Hamade (2012) also points that among the communication tools most useful to students were sending and receiving email with their instructors and peers. As state by Paechter, Maier & Macher (2010), on the contrary, students experience the instructor’s support and expertise as especially important to obtain knowledge, skills and competences and for course satisfaction. Similarity, Malik (2009) also claim that the teacher role is also very important in E-L environment because student seeks from teacher and their timely response positively influences student satisfaction.

According to Embi (2011), what is needed at the national level is a body that can monitor advice and offer assistance, particularly in coordinating resources, platforms and improvements to the existing LMS platforms in HEIs. Therefore, the fully utilization of tools in LMS or ICT technologies to improve student learning progress need to depend how it being used and embedded in learning progress between the students and lecturers.

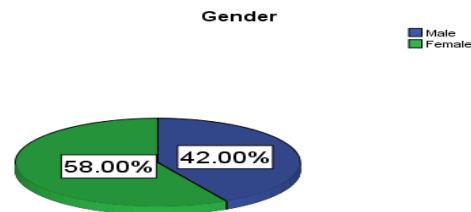
3.0 METHODOLOGY

The respondent of this study was students from STML in UUM. A total of 100 questionnaires have been prepared to achieve the objective of the study and successful been collected. The questionnaire item responses were constructed base on a four-point Likert scale. A descriptive analysis was performed using SPSS software.

4.0 FINDINGS

Overall 100 respondents have participant in the survey, number of female is 58% (58 students) and male is 42% (42 students). The finding analysis will be done through the problem statement for this research where it was about the communication and users in interaction in LMS

are relatively low by comparison of the social networking platforms with the LMS. There have 15 respondents over 30 respondents have answered the Question A1 background of study about the main reason for not using LearningZone because the reason of prefer other social networking tools. Besides, there have 76 respondents answer ‘yes’ and 24 respondents answer ‘no’ for Q11 where about the encouragement from instructors to use Web2.0 tools as an alternative to replace LearningZone UUM. Through the result, we can know that the utilization of communication in LearningZone are relatively low through the popularity of social networking nowadays and encouragement from instructors to use Web2.0 tools as an alternative to replace LearningZone UUM.



Another problem statement is about the instructor play an important role to counseling and supports the students for the construction of knowledge, the acquisition of media competence and satisfaction with a course through the students’ perception. The availability to chat with instructors asynchronously, autonomy to ask instructor question, and receive instructor responds promptly can impact the level of students learning satisfaction through communication in LearnignZone.

4.1 Analysis Base on The Objective

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
How often did you utilized the chat module in Learningzone	100	1.00	4.00	2.3500	.86894
How often did you utilized forum module in Learningzone UUM	100	1.00	4.00	2.9100	.75338
How often did you utilized web meeting module in Learningzone	100	1.00	3.00	1.4100	.63715
Valid N (listwise)	100				

Table above shows the differences between mean and standard deviation based on the question from the Q6i to Q6iii about how often did the respondents utilized the communication tools of LearningZone with the 4 likert scale where 1.00 – never, 2.00 – rarely, 3.00 – sometimes and 4.00 – often. There are only one

minimum value that are 1.00 – never and two maximum values that are 3.00 – sometimes and 4.00 – often. The highest mean value we get is 2.91 that are from Q6ii – forum module in LearningZone. This shows that the respondents rarely and sometimes utilized the forum module in LearningZone because the mean value is near to scale 3.00 - sometimes. The highest standard deviation we found out is 0.86894 from Q6i – chat module in LearningZone. This shows that respondents have different agreement about chat module in LearningZone is high which can prove the overall of respondents did not utilized the chat module. The lowest mean that be found is 1.4100 from Q6iii which shows that respondents are never utilized the web meeting module in LearningZone. The lowest standard deviation is 0.63715 which shows that the differences agreements between the respondents are low about they are never utilized the web meeting module in LearningZone.

We can conclude that the 100 respondents from STML students in UUM did not fully utilized the LearningZone as communication medium among STML students where the chat module is not been fully utilized, forum module is barely been utilized and web meeting module can be conclude as never be utilized. Chat module and web meeting module are rated as not very useful beside forum module. Email has been selected as best communication way with instructor rather than LearningZone and other selection through the responds from respondents.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
My overall experience of using communication in LearningZone is absolutely delighted	100	1.00	4.00	2.7600	.87755
My overall experience of using communication in LearningZone is very contented	100	1.00	4.00	2.6000	.55048
My overall experience of using communication in LearningZone is very pleased	100	1.00	4.00	2.7200	.69747
My overall experience of using communication in LearningZone is very satisfied	100	1.00	4.00	2.5900	.65281
Valid N (listwise)	100				

Table above shows the different between mean and standard deviation for question Q18 where it shows the satisfaction towards communication in LearningZone with 4 likert scale where 1.00 – strongly disagree, 2.00 – disagree, 3.00 – agree and 4.00 – strong disagree. There have only one minimum values that is 1.00

– agree and one maximum value which is 4.00 – strong agree. The highest mean value is 2.76 from Q18i where it shows that the overall experience of using communication in LearningZone is absolutely delighted which are near to agree from all the respondents because the mean value is near to 3.00 – agree scale. Q18i also have the highest standard deviation which is 0.87755 where the different opinion from respondents about this statement is low. The lowest mean value that we found is 2.59 from Q18iv where the respondents is mostly disagree about their overall experience of using communication in LearningZone is very satisfied. The lowest standard deviation is 0.55048 from Q18ii where the differences opinion between the respondents is low for agreeing the overall experience of using LearningZone is very contented with the mean value, 2.600.

The level of students learning satisfaction on communication through LearningZone among STML students can conclude as good through the result in Q18 where the majority of the respondents have shown their agreement in their overall experience of using communication in Learningzone is absolutely delighted, contented and pleased. The disagreement and agreement in the respondents overall experience of using communication in LearningZone is satisfied are very close. Even though the overall result have shown that the level of students learning satisfaction on communication through Learningzone among STML students are good but there have other respondents have shown disagreement in the statement of their experience in using communication in LearningZone. Announcement as a communication tools in Learning have be rated as useful towards learning process.

5.0 DISCUSSION & CONCLUSION

We can conclude that STML students who was participated the questionnaire survey are not utilize the LearningZone as a communication medium through the finding. STML students recognize that LearningZone is a helpful medium for content development (course templates, content sharing) rather than communication and course delivery. There have three modules have been equipped in LearningZone for communication which are forum modules, chat modules and web meeting modules. The finding shows that forum modules have been utilized by respondents. In other hand, chat modules did not be fully utilized and web meeting modules can be

concluding as never is use before. The chat modules and web meeting modules are not well developed because majority of respondents having disagreement with these modules to be useful and less using it especially for web meeting modules. The results also may indicate that most respondents are more prefer to read than sending messaging and participate in discussion. Therefore, we can assume that LearningZone is good for support formal learning, more focus on the distribution of course material and limited student-to-student or student-to-instructors' interactions in the system.

Even though LearningZone have be equipped same function of communication tools in chat modules like chat room and message, it is hard to compete with the popular communicate tools. This could be the reason for not fully utilized chat modules. Besides, LearningZone users are not always be online if compare to online rate in social networking which make the chat room feature in LearningZone less be used. The finding also shows that the instructors also encourage their students to use social networking tools as an alternative to replace LearningZone. This is supported by the problem statement in Chapter 1 where the communication and user in interaction in LMS are relatively low by comparison of the social networking platforms. Besides, the finding has shown some respondents are more prefer the communication in social networking platform that LearningZone.

Through the finding, the level of students learning satisfaction on communication can be concluding as good. Forum modules had been rate as important rather than chat modules and web meeting modules. Impact of learning through communication in LearningZone, perceived learning assistance, perceived community building assistance, usefulness of communication tools that contribute toward learning process, co-participatory activity and satisfactions towards communication in LearningZone have be define as the impact towards the level of students learning satisfaction on communication in LearningZone. This study had reveal that the respondents predominantly using LearningZone to view lecture announcements for upcoming events or activities. This is supported by Section B Q9 where the majority of respondents have select the benefits of using communicate in LearningZone as to manage study activity.

For the conclusion, this research is essential to understand the important of communication in LearningZone towards learning satisfaction. Interaction between students-to-students and instructors-to-instructor can be improve through the fully utilized of communication in LearningZone. Communication is essential to help instructors to understand the problem, situation and any barrier that had been faced by their students in their subject. Students can receive high learning satisfaction through communication in LearningZone because they are feel been appreciate through the interaction between other students and instructors and receive feedback promptly.

6.0 RECOMMENDATION

In order to ensure the students are fully utilized the chat modules, web meeting module and forum modules in LearningZone, the features of communication tools need to be attractive and encouragement from instructors are needed. Improving students' and instructors' knowledge about the LearningZone communication modules should increase the level of satisfaction, utilization of the system and cause positive impact on student learning.

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