

Evaluation of an LMS with Social Networking: A Case Study

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Publication Info

Article history:

Received : 14 February 2019

Accepted : 22 May 2019

Keywords:

Blended learning, Course Networking, e-learning, Learning management System, Moodle

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Abstract

Teaching learning process has evolved from traditional to online learning because of changing requirement of the learner. Now teaching learning process is more learner centric. Learners can select any courses of their interest and attend them according to their availability. These online courses are offered by different universities, organization for the benefit of learner. Many institutes have started using the combination of traditional and online learning known as blended learning. In blended learning face to face interaction is used for discussion, lectures and solving the doubts of students while e-learning technologies are used for online lectures, quizzes, notes etc. Today in this period of globalization, it is exceptionally easy to share and scatter information. Different types of Learning Management Systems (LMS) are available free of cost for teaching, managing and assessing students. In this paper, we have investigated and evaluated e-learning based LMS used in our institute.

1. INTRODUCTION

The growth of internet and WWW has formed the basis of online learning. It is easy to connect, share and learn by using different e-learning technologies. There are different LMS available incorporating different types of learning. These LMS can be simply a repository for student data and subject notes or it can be completely automated grading system keeping students engaged in online discussion, polls, online assignment submission, quizzes etc.[1]. The components of a traditional e-learning based learning management system (LMS) [2], [3], [4] are shown in Figure 1.

These components are helpful in online classes or work from home. LMS's having these components have proved to be a boon in the situation of COVID 19. At our institute we have used Course Networking LMS; it has

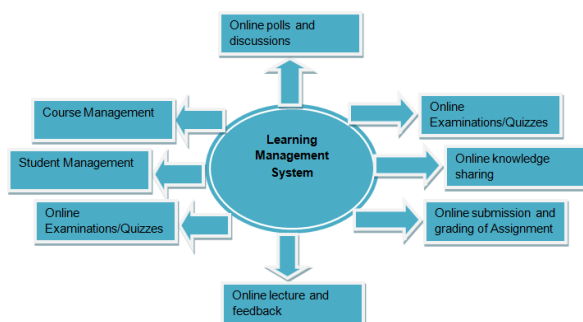


Figure 1: Traditional Learning Management System

made possible the classroom activity from home. It has helped teachers in conducting online lectures, video lecture upload, online assignment submission, grading, assessment, activity tracking of a student in a course. To evaluate the performance of this LMS, we have taken a survey from all our stakeholders. The details of the same are given in the Result and discussion section.

The remaining work is structured as follows, section 2 is Literature Review, section 3 elaborate the Result and discussion, section 4 is Conclusion and section 5 is References

2. LITERATURE REVIEW

In blended learning e-learning is paired with conventional classroom approaches. It has brought a great transform in the teaching learning process rather than just introducing computers to classrooms. A course created in a blended learning model makes use of the time in the classroom for activities that benefit most from direct interaction. Traditional education (especially at the college level) tends to concentrate on presenting content through a lecture in the classroom concentrating mainly on completing the

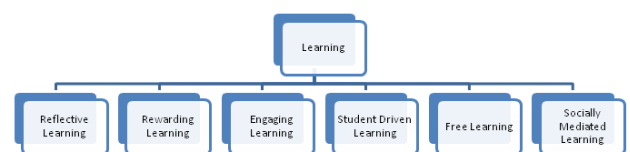


Figure 2: Different types of learnings.

syllabus [5]. On the contrary blended learning makes use of traditional learning and online learning where a student can study/join courses according to their interest. These courses can be live or recorded depending on the content of course. Self time paced courses are more in demand nowadays because they make available the learning resources accessed according to convenience of the learner. Blended Learning combines e-learning's freedom with an face to face interaction between facilitators and fellow students. The facilitator may use flipped classroom technique where he/she asks students to watch an online lecture, followed by classroom discussion. The main aim of all this different teaching learning process is to inculcate learning in learners. Learning is the gain of knowledge through teaching, experience and study. Different types of learning are listed below [6]:

2.1. Reflective Learning

Reflection links current experience with past learnings. Reflection synthesizes and evaluates cognitive and emotional information from visual, auditory, kinesthetic, and tactile etc. sources. Reflective practices empower instructors to teach students in a manner that connects challenges and motivates them to learn. Reflective learning is a peer review of work or concept that enables to review

and reflect on each other's work or concept within and beyond the classroom.

2.2. Rewarding Learning

In reward learning, the learners are awarded some reward on the basis of their performance. It develops the interest of the learner; creates an eagerness and competition among them to learn. Many LMS have gamified teaching learning processes by using anar seeds, coins as a measure of rewards. Rewards have been given to the learner depending on quality of reflection, number of reflection, activeness in the course etc.

2.3. Engaging Learning

Student have changed in recent twenty years because of an innovation rich upbringing, different needs, objectives, and learning preferences among themselves. one needs a better understanding of their requirements in order to engage them in learning. Many universities have supported engaging learning by using a choice based system where students can select the subject that they want to study in a stream. Most of LMS provide engaging learning where students can post their area of interest topics to different communities and learn from reflection [7] [8].

2.4. Student Driven Learning

The learning needs of students changes with their interests, goals, or cultural backgrounds. Various types of education methods have been defined to accomplish the goal of student driven learning such as guidance counselors, modifying assignments and instructional strategies in the classroom, to updating the ways in which students are grouped and taught in a school.

2.5. Free Learning

Free learning is a biggest innovation in the field of education where a number of free online courses are available. A student can enroll in any of the free courses to learn and advance his/her knowledge.

2.6. Socially Mediated Learning

Mediated Learning occurs when a skilled person assists a student in learning. If learning is obtained through sharing of thoughts or experience through discussion.

Learning management systems are meant for the supervision of learning. They help in monitoring, tracking, reporting student performance and provide an environment for implementing the teaching learning process outside the classes through online lectures, quizzes, posts etc..There are many learning management systems which support the above given techniques and learnings. Here , we have considered Course Networking and Moodle learning

Table 1: Comparison of Moodle & Course Networking LMS

S.No.	Criterion	Moodle	Course Networking
1.	User Friendly	Less User Friendly	More User Friendly
2.	Gamified learning	No	Yes
3.	Repository for course material	Yes	Yes
4.	Interaction between peers	Yes	Yes
5.	Online Lectures	No	Yes
6.	Automatic Assessment	No	Yes
7.	Online quizzes	Yes	Yes
8.	Free Learning	Yes	Yes
9.	Engaging learning	No	Yes
10.	Rewarding Learning	No	Yes
11.	Reflective Learning	No	Yes

management systems for a survey which has been used at our institute and performed their comparative study.

3. RESULT AND DISCUSSION

At our institute we have implemented blended learning. We have used Course networking and moodle learning management system teaching learning tasks. For assessing

both the tools we have surveyed about 208 people. This survey has included all the stakeholders i.e. students, faculties, alumni and parents. The result of survey has been given in the table below:

3.1. Student feedback about LMS

3.2. Faculties feedback about LMS

3.3. Parents feedback about LMS

3.4. Alumni feedback about LMS

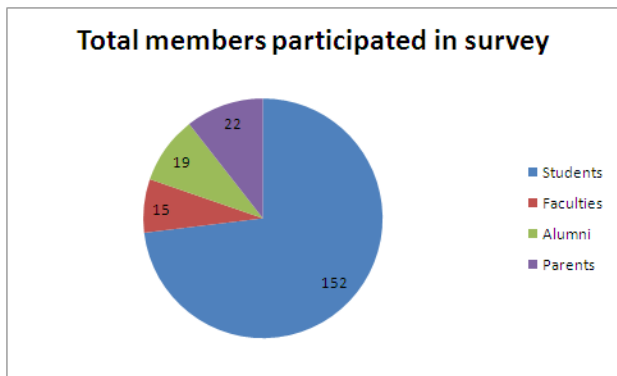


Figure 3: Total members participated in survey

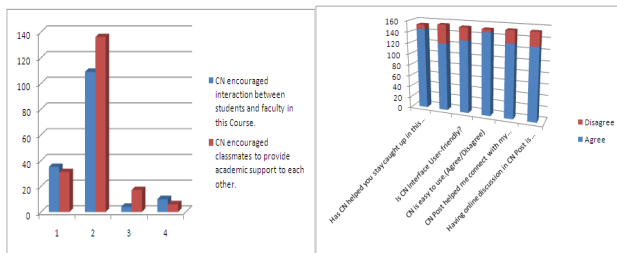


Figure 2: Graphical representation of students questionnaire.

Table 2: Participants of survey

S. No.	Stakeholder category	Total members participated in survey
1	Students	152
2	Faculties	15
3	Alumni	19
4	Parents	22
	Total	208

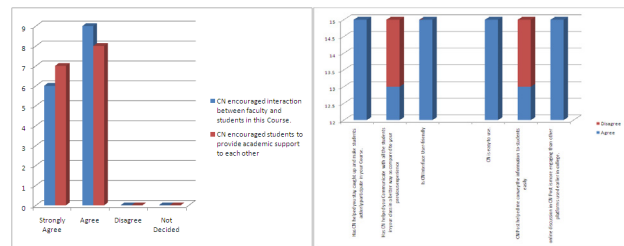


Figure 3: Graphical representation of Faculties questionnaire.

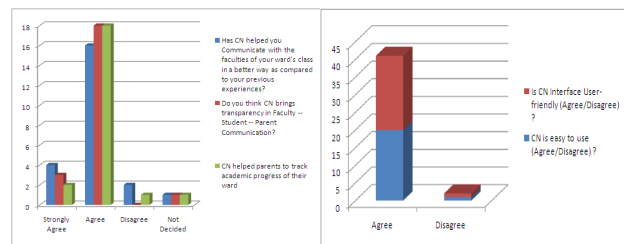


Figure 4: Graphical representation of Parents questionnaire.

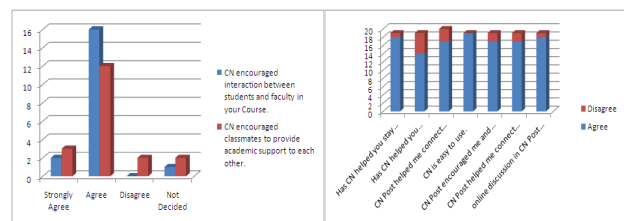


Figure 5: Graphical representation of alumni questionnaire.

Table 3: Questionnaire for students and corresponding result

S. No.	Question	Strongly Agree	Agree	Disagree	Not Decided
1	CN encouraged interaction between students and faculty in this Course.	35	109	4	10
2	CN encouraged classmates to provide academic support to each other.	31	136	17	6
3	Has CN helped you stay caught up in this Course (Agree/ Disagree) ?	NA	145	8	NA
4	Has CN helped you Communicate with other students in your class?	NA	122	33	NA
5	Is CN Interface User-friendly?	NA	130	23	NA
6	CN is easy to use.(Agree/Disagree)	NA	147	5	NA
7	CN Post helped me connect with my peers. (Agree/Disagree)	NA	131	22	NA
8	Having online discussion in CN Post is more engaging than other platforms used earlier in college. (Agree/Disagree)	NA	129	24	NA

Table 4: Questionnaire for faculties and corresponding result

S. No.	Survey Question	Strongly Agree	Agree	Disagree	Not Decided
1	CN encouraged interaction between faculty and students in this Course.	6	9	0	0
2	CN encouraged students to provide academic support to each other	7	8	0	0
3	Has CN helped you stay caught up and make students actively participate in your Course (Agree/ Disagree)?	NA	15	0	NA
4	Has CN helped you Communicate with all the students in your class in a better way as compared to your previous experience (Agree/ Disagree)?	NA	13	2	NA
5	Is CN Interface User-friendly(Agree/ Disagree)?	NA	15	0	NA
6	CN is easy to use.	NA	15	0	NA
7	CN Post helped me convey the information to students easily	NA	13	2	NA
8	Having online discussion in CN Post is more engaging than other platforms used earlier in college.	NA	15	0	NA

Table 5: Questionnaire for Parents and corresponding result

S. No.	Survey Question	Strongly Agree	Agree	Disagree	Not Decided
1	Has CN helped you Communicate with the faculties of your ward's class in a better way as compared to your previous experiences?	4	16	2	1
2	Do you think CN brings transparency in Faculty -- Student -- Parent Communication?	3	18	0	1
3	CN helped parents to track academic progress of their ward	2	18	1	1
4	CN is easy to use (Agree/Disagree) ?	NA	20	1	NA
5	Is CN Interface User-friendly (Agree/Disagree) ?	NA	21	1	NA

Table 6: Questionnaire for alumni and corresponding result

S. No.	Survey Question	Strongly Agree	Agree	Disagree	Not Decided
1	CN encouraged interaction between students and faculty in your Course.	2	16	0	1
2	CN encouraged classmates to provide academic support to each other.	3	12	2	2
3	Has CN helped you stay caught up in your Course (Agree/ Disagree)	NA	18	1	NA
4	Has CN helped you Communicate with other students in your class?	NA	14	5	NA
5	CN Post helped me connect with my peers.	NA	17	3	NA
6	CN is easy to use.	NA	19	0	NA
7	CN Post encouraged me and my classmates to provide academic support to each other.	NA	17	2	NA
8	CN Post helped me connect with my peers.	NA	17	2	NA
9	Having online discussion in CN Post is more engaging than other platforms used earlier in college. (Agree/Disagree)	NA	18	1	NA

4. CONCLUSION

The above given survey states that course networking is a user friendly and easy to use for all the stakeholders. Some

parents have found difficulty in using this LMS but they have been included in the stream during PTM. During PTM they were informed regarding the use of the platform and

its features. Students and faculties have adopted the LMS very well in the teaching learning process. It has increased the interaction between faculties and students a lot. This LMS has been a boon in the situation of COVID 19. It helps in online lectures, assignment submission, video lecture upload, assessment, activity tracking of a student in a course. It has made possible classes outside teaching institute premises.

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