

Measuring the Success of Moodle at Kristu Jayanti College – Bangalore

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Abstract

The main idea of this study is to decide the goal of supporting the utilization of a LMS (Learning Management System) under Modular Object-Oriented Dynamic Learning Environment (Moodle), in the formation of virtual study rooms in Kristu Jayanti College. This present examination's goal is to decide the expectation of utilizing Moodle to create virtual study halls: Information Quality, System Quality, Complimentary Technology, Self-Efficacy Measure, Service Quality, User Satisfaction, Use and Perceived Net Benefits. The eight parameters mentioned here build the general attributes of Moodle which likewise help breakdown a superior comprehension of the accomplishment of the Kristu jayanti college learning the executives framework. So as to gauge the achievement of Moodle, 120 students were assessed based on these eight parameters in the moodle. The point of this assessment was to examine the client experience of utilizing MOODLE and furthermore the advantages and hindrances towards its utilization. The consequences of the investigation would be helpful to the organizations attempting to coordinate innovation in their instructing and learning measures.

Keywords: Moodle, Learning Management Systems (LMS), Open Source

1. Introduction

This study observes the fruitful online learning including the impacts of intelligent and learning structures empowered by various Learning Management Systems (LMS) on fulfillment and student commitment in online courses [5]. Learning tools utilizing data and technologies that offer adaptable, intelligent learning situations which instructive organizations are utilizing to give top notch training redid to the student prerequisites. The requirements of this study in the condition incorporate the quick trade of data, which can encourage more fast learning.



In online courses, all guidelines are intervened by innovation; by and large this is a LMS, for example, Chalkboard or Moodle. Slate and Moodle are two Learning Management Systems with a ton in like manner, yet there are some key contrasts which make every one unique in its own particular manner [6]. The Chalkboard Learning Structure permits educators to post course data and course materials, readings and tasks and gives usefulness to essential conversation and other community oriented tools from Blackboard [6]. Moodle framework is a free Open Source programming bundle structured utilizing sound academic standards, to assist teachers with making successful online learning networks [6].

The innovation used to help an online course may influence the recurrence and way wherein understudies and personnel collaborate with each other, give and get criticism, and communicate with course materials. Subsequently, this paper clarifies how understudies see the LMS used to have an online course, and whether those recognitions influence the achievement of online guidance. This investigation will introduce the viability of utilizing Moodle and Blackboard in LMS on understudies and student to upgrade their learning and comprehension by attempting to address this inquiry:

What are the distinctions on Moodle and Blackboard highlights in terms of achievement in actualizing the LMS? The motivation behind this investigation is to look at between the main exclusive arrangement, Blackboard, and the main open source arrangement, Moodle dependent on some past examinations.

2. Literature Survey

Moodle is a widely used LMS in both first world and underdeveloped nations. Moodle is an open source stage whose characteristics are, yet not limited to, being user friendly, flexible and accessible. Lecturers can screen Moodle usage by students, integrate the stage into other systems, manage personal/private data and interaction can happen simultaneously (Kasim and Khalid, 2016).

Various terms are used to describe e-learning, for example, distance learning, internet learning or on-line learning, where teaching and learning processes happen on computers connected to the internet. The benefits of elearning are fundamentally learning independently of time and place, reducing geographical barriers just as travel and program above costs, where each individual can examine the material at their own pace (Cole, 2000;). Regardless, other than the various favorable circumstances of this kind of study, there are furthermore various drawbacks which can diminish the beneficial outcome of present-day ICT instruments on understudies' presentation (for example in Wang et al., 2003). Additionally, in the e-learning measure there are similarly various explicit components included. (Poulova, 2013; Haverila and Barkhi, 2009; Kim and Kim, 2013; Ozkan and Koseler, 2009; and Park;) that are not legitimately



associated with the ICT yet essentially impact the understudies' presentation (Lopez-Perez et al., 2011), sometimes additionally in a undesirable way (Berge and Huang, 2004; Frankola, 2001; Willging and Johnson, 2004).

One of the fastest developing software programs is the learning management system, which manages courses, keeps tabs on students' development, offers self-evaluation tests, underpins teaching and learning process, and enables correspondence. One of the most well known is the open-source learning management system Moodle, already widespread in all segments of education. System is very flexible, adaptable and contains numerous standard features, which make it mainstream. LMS Moodle has discovered its place likewise in higher education. In the study exploring e-learning stages used in Italian universities (Campanella et al., 2008), Moodle was placed in a gathering of the most valued stages. Kareal and Klema (2006) looked at explicit highlights of some open-source e-learning frameworks and inferred that Moodle is one of the most versatile, which is a fundamental bit of powerful training as they brought up, and most easy to understand learning frameworks among all the thought about ones. Liao et al. (2011) considered the usage of a Moodle course in mixed learning at a college and found that for understudies Moodle e-learning stage is anything but difficult to utilize and gives a fair specific gadget to agreeable learning in social events. They reason that Moodle e-learning stage could improve the idea of understudy learning.

Interestingly, K. Jebari, et al, (2017) tested Moodle Success by contemplating three types of learning patterns and comparing the results against the student profile. K. Jebari, et al, clarified that teachers must not underestimate student's competency when utilizing Moodle (Jebari et al, 2017). Results displayed that having an e-learning methodology with bunch checking is the best when utilizing Moodle. Students were more interested to use the IS when lecturers made themselves more available. Since e-learning has been a significant and ever more commonly used teaching technique in the previous few decades, there are numerous conclusions just as studies on its effect on students' performance. Delivering directions that can produce equal or even better outcomes than face-to-face learning systems is one of the primary objectives of bringing ICT into the study process ((Carr, 2000; Saba, 2012).

3. Research Objectives and Methodology

The research objectives are :

1. To examine the efficiency of MOODLE as a teaching management tool.



- 2. To decide and survey the sake of and barriers to the use of MOODLE.
- 3. To decide the functionality of various features of MOODLE.
- 4. To estimate the general experience of students using MOODLE as a studying tool.

They illustrate the survey of the students and the faculty of the Computer Science Department, Kristu Jayanti College. The sample size was 180 students and 40 teachers. The Moodle was installed on a server in the Kristu Jayanti College premises and provided the user ids to all students and faculty members. They demonstrated the use of MOODLE to all participants through workshop, faculty development program and Video presentation. Video presentations about the access and the important features of the software and its use were prepared and circulated among the teachers through e-mail. After the demonstration students and faculty members gained confidence, the course management part (distribution of class notes, forum, quiz, uploading the video content, link and news updates) and the evaluation part (quizzes, short answer, and assignments) were facilitated through MOODLE. The students who were in the last semester of their courses and were away on projects also used this software to keep in touch with the course activities. They were asked to submit the answer scripts, projects and assignments through this software only. Final exam also conducted through Moodle.

4. The Moodle Experience in Kristu Jayanti College

The vast dominant part of students were in the 16-23 age gathering (80%), which fits the overall profile of master level students. 56% of the students were female while 44% were male.

Basically no students had an encounter of utilizing MOODLE before joining the courses. A critical dominant part of the students were sure about the circulation of notes through this discussion (80%). Also, 95% of the students felt this was a decent tool for transferring class tasks and submitting reports. 80% of the students likewise expressed this was a decent framework .However, when it came to class evaluations around just 78 % felt that this instrument was useful for leading goals and emotional tests while 25-31% felt this was not a decent device by any expanse of the imagination. 62 % students felt this was a decent tool for transferring individual profiles.





Figure 1: Students' experience of the various features of MOODLE

When reviewed concerning hindrances utilizing MOODLE, not a solitary understudy revealed that he/she didn't have the important specialized aptitudes. This shows the specialized competency of the apparent multitude of students was acceptable and they could receive MOODLE well. Notwithstanding, 9% revealed that they felt utilizing MOODLE was additional work and 5 % detailed they didn't care for the innovation. Of the 91 % students utilizing MOODLE, almost half of these (44% generally) detailed that they didn't confront any hindrances whatsoever. While 25% confronted issues identified with system and data transmission, 8% announced that they didn't have the necessary specialized help. Just 9 % detailed that they had alternative choices.

5. Discussion

The model is made up with a casing of six constructs. The most significant build to gauge the accomplishment of Moodle is the apparent Net Advantages. This construct gives a perspective fair and fulfillment students have utilizing Moodle. The outcomes show that the framework is fruitful for the college since individuals are happy with Moodle. The general normal of reactions rate was awesome for this development. The outcomes are more prominent than the nonpartisan point , which implies that more students discover Moodle to be useful and valuable.

5.1 Information quality

In Figure 2 shows the normal reactions for all the respondents that participated in the review. share of the outcomes are between a score of 5 and 6. This is a decent sign that most students are happy with the nature of data on Moodle. A little segment of the students are not happy with the framework nature of Moodle





Figure 2 : Histogram of Information Quality

5.2 System Quality

The Histogram in figure 3 portrays the normal reactions for all the respondents that took an interest in the review. In view of the Histogram of Framework Quality, the huge mainstream of the outcomes are between the paces of 5, 6 and 7. These discoveries demonstrate that a larger part of the students trust Moodle simply to utilize and very easy to understand. This additionally implies Moodle gives rapid data admittance to students. Likewise to be noticed that a little bit of the students are not happy with the Framework Nature of Moodle.



Figure 3 : Histogram of System Quality

5.3 Complementary Technology

In Figure 4 chart shows the midpoints reactions for all the respondents that partook in the overview. In view of the Histogram, the greater part of the students



discover the product, equipment and web interface is satisfactory for Moodle. The more prominent dominant part of results are over the normal recurrence circulation, going from 4 to 7; which implies that most students are happy with the Integral Innovation Nature of Moodle. Scarcely any students are not fulfilled.



Figure 4 : Complementary Technology Quality

5.4 Self-Efficacy

In Figure 5 shows the averages of the Self-Efficacy measure from all respondents that contributed in the study. Based on the results the highest response rate was 6. This indicates that most students agree that they can complete their course necessity using Moodle. A small portion of the students are not satisfied with the Moodle as it relates to Self-Efficacy , these results range between 1 and 3.





5.5 Service Quality

In Figure 6 the chart shows the average responses by students indicates changing result. The results show that students are uncertain on the Service Quality of Moodle. Based on the Histogram, the highest respondent average was 6, followed by 4 and 2. Interestingly respondent averages responses of 1, 3 and 5 shows that students were not pleased with the quality of service from the support staff of Moodle. There is scope for improvement on the service quality indicating that probably IT engineers are not working to balance or there are barriers between the students and IT department.



5.6 User Satisfaction

In Figure 7 chart shows the Users' Satisfaction is shown in Histogram, Based on the average responses from students, most of the results are between 5 and 6 which signify that users are satisfied. Almost 30 students slightly agreed with the User's Satisfaction of Moodle. A small amount of students are not satisfied with using Moodle.





6. Conclusion

The overall success of Moodle had to be broken down into six main paradigms: Information Quality, System Quality, Complementary technology, Self-Efficacy , Service Quality, and User Satisfaction, The paradigms of complementary technology and the self-efficiency measure had become the basis of gathering data in order to estimate all parts of information systems in Moodle. Upon evaluating the constructs, a connection was made through the user satisfaction being highly delightful which boosted the self-efficiency measure because since Moodle was user friendly, users were capable in self applying themselves in using Moodle. In addition, complementary technology also created an impact on the other constructs because the internet, software and hardware also played a crucial part in counterbalancing the other qualities of Moodle, especially the Perceived Net Benefits. Since the Kristu Jayanti College is an educational institution made it crucial to the study in order to maximize the overall analysis of Moodle.

The information collected also helps in providing additional study based on the analysis of success of Moodle. This research presented mostly positive results in the overall success of Moodle from the students Kristu Jayanti College. The Service Quality of Moodle was the least satisfactory out of all other constructs. Analysis indicates that service quality provided by information technology administrators are not working satisfactory to the user's expectations which indicates room for improvement in this construct of Moodle.

References



[1] Livingstone, Sonia. "Critical reflections on the benefits of ICT in education." Oxford review of education 38.1 (2012):pp. 9-24.

[2] Cole, Robert A., ed. Issues in Web-based pedagogy: A critical primer. Greenwood Publishing Group, 2000.

[3] López-Pérez, M. "Victoria & M. Pérez-López, and Lázaro Rodríguez-Ariza. 2011." Blended learning in higher education: Students' perceptions and their relation to outcomes."." Computers & Education 56: 818-826.Lopez-Perez, M. V., Perez-Lopez, M. C., & Rodriguez-Ariza, L. (2011), pp. 818–826.

[4] Kim, J. K., & Kim, D. J., A meta-analysis on relations between e-learning research trends and effectiveness of learning. International Journal of Smart Home, DOI:10.14257/ijsh.2013.7.6.0, 7(6), (2013). pp.35–48.

[5] Alshibly, Haitham Hmoud. "Evaluating E-HRM success: A validation of the information systems success model." International Journal of Human Resource Studies 4.3 (2014): 107.

[6] DeLone, William H., and Ephraim R. McLean. "Information systems success: The quest for the dependent variable." Information systems research 3.1 (1992): pp.60-95.

[7] DeLone, W. H., & McLean, E. R., The DeLone and McLean Model of Information Systems Success: A Ten-Year Update. Journal of Management Information Systems, 19 (4), (2003). pp.9-30.

[8] Ellis, R. (2009). A field guide to learning management systems. USA: American Society of Training and Development (ASTD).

[9] Fındık-Coşkunçay, D., Alkış, N., & Özkan-Yıldırım, S, A Structural Model for Students' Adoption of Learning Management Systems: An Empirical Investigation in the Higher Education Context. Journal of Educational Technology & Society, 21(2), (2018), pp. 13–27.

[10] Hadullo, K., Oboko, R., & Omwenga, E., A model for evaluating e-learning systems quality in higher education in developing countries. International Journal of Education & Development Using Information & Communication Technology, 13(2), (2017), pp. 186–204.

[11] Jebari, K., Boussedra, F., & Ettouhami, A, Teaching "Information Systems Management" with Moodle. International Journal of Emerging Technologies in Learning, (2017), 12(4), pp. 4–16.

[12] Kasim, N. N. M., & Khalid, F., Choosing the Right Learning Management System (LMS) for the Higher Education Institution Context: A Systematic Review. International Journal of Emerging Technologies in Learning, 11(6), (2016). pp. 55–61.

[13] Lawler, A, LMS transitioning to Moodle: A surprising case of successful, emergent change management. Australasian Journal of Educational Technology, 27(7), (2011)..

[14] Petter, S., DeLone, W., & McLean, E., Measuring information systems success: models, dimensions, measures, and interrelationships. European journal of information systems, 17(3), (2008), pp. 236-263.

[15] Sharma, A., & Vatta, S., Role of learning management systems in education. International Journal of Advanced Research in Computer Science and Software Engineering, 3(6), (2013).

[16] Wan, A. T., How can learners learn from experience? A case study in blended learning at higher education. International journal of information and education technology, 5(8), (2015), pp. 615.