

# New Paradigm in Learning through Futuristic Learning Management System

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**ABSTRACT** - The today's scenario of changing word due to the pandemic situation created by covid 19 is affecting the all activities in human life, educational system as a part of our life, too affected with this, to overcome this situation and continue with education we can implement the Learning Management System (LMS), as it is driven online it has taken rapid uptake of campus-wide learning LMS is changing the character of the on-campus learning experience.

In this paper will discuss about the basic concept of LMS, importance and usability of LMS, evaluation factors for LMS and the detailed study of MOODLE. It discusses in particular the possible effects of LMS on teaching practices, on student engagement, on the nature of academic work and on the control over academic knowledge.

**Key words** – *Learning Management System, MOODLE, Open Learning, Hybrid Learning.*

## I. INTRODUCTION

Technologies are updating day by day and these changes in technology have great impact on education, since is changing its paradigms, from a teacher-centered classroom model to student-centered open model, where teacher plays role of administrator, mentor, guide, evaluator, monitor etc.

A learning management system (LMS) is software mostly used for academic purpose in the delivery of academic courses, administration of course, uploading of necessary documents tracking and reporting of students for attendance, teaching and learning programs. Even though the main purpose of development of LMS was academic, now a day's LMS is used in corporate sectors also. [1]

## II. LITERATURE REVIEW

Coates, H., James, R., & Baldwin, G. (2005) stated that LMS suggest that we can increase the efficiency of teaching with the help of LMS., students are getting attracted towards the LMA as it enriches student learning, students are getting new experience and also fulfilling their expectations. As there is advancement in technology student's expectations are also increasing. LMS is the key mean to fulfill these demands in higher education. It can also be called as a new culture of teaching and learning in higher education. [2]

Fathema, N., Shannon, D., & Ross, M. (2015) discussed about Learning Management System which provide tools and functions like creation of course, online study material like notes, images, pdf, word files etc.[3] course

dissemination, course evaluation through test, interaction with students through forum, live chat to discuss the issues etc.

Lopes, A. P. (2014) stated that the Moodle is used throughout the world for online teaching learning there are many schools, colleges, Universities are using this platform. With the help of this platform teachers and students can work collaboratively.[4]

Lonn & Teasley, (2009) study about Teachers and students are getting a good experience of different tools in LMS. Teacher can create a online platform as e-learning platform for students for knowledge dissemination.[5] Teacher can save time for preparation of course as compare to classroom teaching, he can use same material for different batches hence, can save efforts of reproduction of study material.

Turnbull et al., (2019) Has discussed the features of LMS like course management, course assessment, tracking progress, security and privacy, social connectivity, communication tools etc. LMS involves in the process of innovation it the education sector to support online learning.[6]

## III. OBJECTIVES

1. To understand the importance of LMS
2. To know the types of LMS
3. To study the important factors of evaluation of LMS
4. To know the features of MOODLE.

#### IV. IMPORTANCE / FEATURES OF LEARNING MANAGEMENT SYSTEMS

##### 1. Easy for implementation

Implementation of LMS is very easy step, it works for any kind of educational institution, it helps in bringing all programs, teachers, students, subjects under a single platform.

##### 2. Improving the learning experience

The main objective of LMS is to improve the learning experience; LMS are not only a virtual space created for learning, but make learning a more complete experience.[7] This platform is fitting for any kind of institution or any kind of branches it may be Engineering or Social science. Use of LMS result in improvement in student's performance and it gives motivation to the students.

##### 3. Portability

The MOODLE is accessible from anywhere with any kind of device like computer, android mobile, tablet, note etc with internet connection. When teacher want to take class he may connect with students through virtual class room even if students are not at their native, may be they are in travelling also can attend the class.

##### 4. Better involvement of teachers and students

Moodle provides platform for teachers and students to be together, be it at school or university, whenever they want to access information it is available for them. It acts as channel of communication for virtual classroom, in case of teachers and students also.

##### 5. Reliable

Educational platforms allow complete personalized access to all members of its community, students are getting the support and feel like in the classroom, it is very useful communication tool for virtual campus that you need.

##### 6. Maximum efficiency

The Moodle provides platform for course administration, efficiency in course delivery, simplicity in process, maximum benefits to teacher in course dissemination and students to collaborative learning. [7]

Helps in all kind of educational courses, personalization of course as any educational centers' needs,

e.g. LMS can contain: course preparation, course delivery, content holding, content management, conducting test, analysis, feedback and many more making for maximum efficiency.

##### 7. No need for training

The moodle platform is so user friendly that to work on it there is no need of any kind of training. It's objective is to

make the lives of users much easier and pleasant. Also it has no requirement of user manual. It is very much user friendly that we can use even new features of it without any problem.

##### 8. Save your time and money

Having all information in the same place is a strong argument for using an LMS, It provides single platform where you will find all the data at a glance which will save our time for data search. It gives authority for management of course, study material, delivery, text, quiz, evaluation etc with very ease, hence n number of classes can be taken with same dat which will save money and time.

#### LMS platforms include the ability to:

- Create an educational workflow that makes sense for different environments including blended learning
- Collaborate within the system – both instructor with students and students with students [8]
- Create, administer and score tests
- Generate reports for students, teachers, and administrators
- Enable mobile access.

#### V. LEARNING MANAGEMENT SYSTEM

In learning management system creation of the course is most important thing, creating a course means in which way we want to disseminate the information to our students, the effectiveness of course creation is depends on the functionality of our LMS, we can build our course with LMS which can be taught with fun. The function of LMS is on creation of course, management, dissemination, quiz conducting, evaluation with self-marking tests is easily embedded within the course.

The other important part of LMS is student data, with this data teacher can easily communicate them about the course and its schedule. The focus of LMS is to engage and motivate learners more than ever before. In particular, features that motivate learners incentivize achievement and can make learning fun because of which we could see interaction and subsequently results improve.

1. Useful:- Whether LMS is useful for the students to fulfill their purpose, whether it may be Learning, attending for personal growth, for academic growth, for brain storming, for serious study and research purpose or just for time pass.

2. Usable: - Whether users are able to achieve their objective with the help of LMS, are the able to fulfill their above mentioned requirements.

3. Desirable:- Overall experience about LMS used, like preparation of presenter, study Material provided,

technical environment used, response to the students queries etc.

4. Findable:- whether students are able to find the answers to the questions in their mind.

5. Accessible:- Whether students are able to access all the required supporting study material at a glance, there should not be any obstacle.

### LMS Deployment Options

#### a. Cloud-Based (SaaS)

These LMS platforms are hosted on the cloud. In this case there are vendors who take care of online up gradation or updating of system, they create login Ids and passwords for individuals to get access to online system, as it is cloud based, there is no need to install any software or updates.[9] This is very good option for the institutes who wants to start immediately with readymade platform. The main drawback of this system is we cannot customize it as per our requirements.

#### b. Self-Hosted

Self-hosted LMS platforms allow for greater creative control and customization. Learning Management Systems that require software downloads. You can directly download this application on your PC or vendor may download it for you. However, the former is more common these days.

#### c. Desktop Application

This application can be installed on desktop, also can be accessed on multiple devices for collaborative eLearning.[9]

#### d. Mobile Application

Learning Management Systems that are accessible any time any where via mobile phone. Teachers can use mobile to upload course material online for class, which can be accessed through mobile by the students.

### LMS Licensing Types

#### a. Open Source

Open Source LMS are free and online based software's. As per our requirement and convenience we can modify their codes, In case of many online platforms there is a online community where we can get help for any issue related to that platform.

#### b. Free License

in case of open source systems, there are a number of free LMS options, in regular paid systems the money which we are paying for purchase that can be used for training IT people to handle these systems

#### c. Paid License

In this case we have to pay for the system it may be yearly basis, also they are having Annual maintenance contract. In this case vendors provide more advanced support options and user-friendly features.

e.g. **MOODLE**

MOODLE is a free online platform where we can create effective online learning sites. We can install Moodle on many servers as it is free. There is no annual maintenance to be paid for, updates are freely available, we can update as per our requirements. Mainly teachers are managing this platform as per their course design. This platform is worldwide used by Schools, Institutions and Universities.

It is a globally supported system as an open source platform for teaching and learning.

First, there are currently over 1,300 plug-in available to extend the functionality of the LMS. Second, if we don't want to go it alone, Moodle has a worldwide network of partners who are ready to help.[10]

### SOME FEATURES OF THE MOODLE PLATFORM

The Moodle platform has three levels of use with three different functions as first Administrator who manage the all functions and study environment, second teacher who create the lesson disseminate content, and conduct event and third student who are accessing the specific information on the subject they have enrolled.

#### Moodle has following facilities

##### Chat

This facility allows participants for real time discussion, this provides very good platform to discuss difficulties in current topics and to get solution for the same. This is having good feature of managing and reviewing chat discussions.

##### Database

This feature provides a big data about the topic which includes text, images, files, videos, urls. Database consists of multiple fields, which we need to create. There is upper and lower limit for number of participant and number of entries in order to view them in single window.

##### Forums

Forums are used for asynchronous online discussion. When students subscribe to the forum they receive copies of each new post by email. Teachers can impose subscription on everyone if they want to, when students are added to any forum it goes very easy to contact all students on a course. Students and teachers can post their views on current topic of discussion, when any new forum is started all the registered participants get alert by email automatically.

## Glossary

This is like a dictionary in which the participants can make a list of terms and definitions. This can be used to build an annotated list of useful websites or FAQs.

## Questionnaire

The Teacher can prepare a questionnaire to create survey, to collect the feedback on his course delivery for its evaluation. All the students are allowed to fill up the questionnaire and submit with his original name or as anonymous.

## Scheduler

It is a timetable of the course which is allocated different slots of course in different timing, students may sign up and attend the course as per their convenient timing, This is useful for required meetings between student and professor, such as advising days, or simply for optional office hours.

## Lesson

This is a conditional pathway through which students can access material, it is having number of pages and each page will be having question with multiple choices, if students are able to answer these questions then only they will be allowed to move to next page. This is considered as a most helpful tool for practicing material, studying, and testing.

## Assignments

Assignments are given after completion of course for the purpose of finding out students' understanding level about that particular topic, Assignments have to be submitted online which will be later evaluated by teacher and grades will be given. Assignments can be given in MCQ format or word, PDF, PPT, Image files can be uploaded.

## Advanced Uploading of Files

This option is open when students want to submit multiple files at a time, the maximum number of files and maximum size of file is to be set by teacher. Teacher can decide which students will work with which group, also parameters will be decided like can student delete uploaded file, can student write to a teacher, assignment due date, whether like to receive email after every submission etc.

## Online Text

This option is for short text-based assignments. For example, if we wanted to collect the students' opinion about the reading assignment, that can be collected through this option. This option will not allow to attach any file, students can only send text in a text editor box of a short paragraph size, where they can type something up online and submit it to us.

## Upload Single File

When we want students to submit their work through a single file and when it is very small in size there is a good option of upload single file. This feature is same like advanced uploading of file except for the number limit on each student. Teacher can set a submission policy, date, time, resubmission and the size of the file.

## Quiz

The module has a provision for creating a quiz, it is having different options like range of questions, types of options, marking and grading system. It allows all students to take quiz at a time with randomization of questions and computerized evaluation and marking system.

## Wiki

In this function everybody from a particular group can contribute for the topic, we can get report on who has contributed and when, even wiki can be rolled back to a previous version at any time. It allows a very simple way of creating and editing the web page.

## Survey

With the help of this facility we can do survey and find out the usefulness of the coursework.

## VI. LIMITATIONS OF LMS

One of the most obvious limitations of LMS is their reliance on forms of assessment such as multiple choice and short response tests. Investigating this point involves analyzing the general dynamics of students' engagement or interaction with their institutions. One dimension of engagement is the broad out-of-class interactions students have with their universities.

There is a plethora of unanswered questions: Are LMS affecting how students' understand their higher education community and their self-identification within those communities? By packaging universities into an online environment, do LMS make it easier for students to identify and explore institutional resources and services? How do LMS influence students' feelings of inclusion in broader academic communities? What are their perceptions of LMS-mediated interactions with staff and other students?

## VII. CONCLUSIONS

The use of LMS in a computer era is a great blessing for higher education institutes. In Higher Education the learning management system is used for creation of courses, dissemination of course, platform to make available study material, assess students via test and assignments, collaborate with peers, and communicate with professors and more. The LMS in higher education provides a central location for all course resources, enabling professors and faculty to get a comprehensive



overview of learning in departments, courses, by individual learners, and more. Student can get benefit of the diversity of online information, communication, collaboration and sharing with others.

## REFERENCES

- [1]. Dahlstrom, E., Brooks, D. C., & Bichsel, J. (2014). The current ecosystem of learning management systems in higher education: Student, faculty, and IT perspectives.
- [2]. Coates, H., James, R., & Baldwin, G. (2005). A critical examination of the effects of learning management systems on university teaching and learning. *Tertiary education and management*, 11, 19-36.
- [3]. Fathema, N., Shannon, D., & Ross, M. (2015). Expanding the Technology Acceptance Model (TAM) to examine faculty use of Learning Management Systems (LMSs) in higher education institutions. *Journal of Online Learning & Teaching*, 11(2).
- [4]. Lopes, A. P. (2014). Learning management systems in higher education. In *EDULEARN14 Conference* (pp. 5360-5365). Proceedings of EDULEARN14 Conference-IATED Publications.
- [5]. Lonn, S., & Teasley, S. D. (2009). Saving time or innovating practice: Investigating perceptions and uses of Learning Management Systems. *Computers & Education*, 53(3), 686–694. <https://doi.org/10.1016/j.compedu.2009.04.008>
- [6]. Turnbull, D., Chugh, R., & Luck, J. (2019). Learning Management Systems: An Overview. In A. Tatnall (Ed.), *Encyclopedia of Education and Information Technologies* (pp. 1–7). Springer International Publishing. [https://doi.org/10.1007/978-3-319-60013-0\\_248-1](https://doi.org/10.1007/978-3-319-60013-0_248-1)
- [7]. <https://www.cae.net/lms-in-your-educational-centre-reasons-to-implement>
- [8]. <https://pagely.com/blog/learning-management-systems-in-higher-education>
- [9]. <https://elearningindustry.com/what-is-an-lms-learning-management-system-basic-functions-features>
- [10]. <https://ethinkeducation.com/blog/what-is-an-lms-the-basics-of-learning-management-systems>
- [11]. <https://www.webanywhere.com/2018/06/20/what-is-a-learning-management-system-lms>