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# Learning Management system (LMS) for Educators: An In-Depth Analysis with References to MOODLE

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**Abstract:** An expeditious transformation is taking place in the edification sector, where more of online and technical mode of communication is being habituated vis-à-vis traditional approach. Many online platforms are adopted by the erudition givers to edify the target audience. This Research paper focuses on the Free and Open Source Learning Management System (LMS) MOODLE for knowledge sharing and assessment there are multiple LMS available today with the incrementation in demand, however, in this study, the researcher has fixated on the role of MOODLE LMS for imparting cognizance from an educator's perspective.

**Keywords:** LMS, MOODLE, Resources, Activities, Education, Free and Open Source

## I. INTRODUCTION

In this technology driven world, it's a need of the day to make education available online for the learners. This procedure of making learning available anytime, anywhere, at a click of a button, a concept of management system such a "Learning Management Systems emerged. There are many types of LMS platforms available depending on their storage location, like Cloud based, Self-hosted, Desktop Application and Mobile App. As per the pricing models, LMS are classified into Open Source, Paid and Free License Systems. Modular Object-Oriented Dynamic Learning Environment, earlier known as Martin's Object-Oriented Dynamic Learning Environment, is a Free & Open Source Online Learning Management System in which knowledge givers can create their own private website and upload their courses to make learning easily accessible to learners anytime and anywhere. MOODLE has a lot of features for Course Development and Teaching Management. The core part of teaching system is teaching pedagogy. Collaborative activities, teaching content from different sites, inclusion of multimedia make imparting knowledge interesting and effective. As part of evaluation process, individual and group assessment practices can be adopted. There's an inbuilt system which helps in formation of groups and assignment of modules to the learners. In MOODLE, multiple assignment and assessment modules are available to make learning interactive and measurable. In this paper, features of MOODLE are explained that are useful from an educator's perspective. Though it's not a very efficient face-to-face mode of communication, but it can be used alongside traditional teaching models since it provides many features that can make learning innovative and meaningful.<sup>[1]</sup>

## II. MOODLE

A Learning Management System The very first step to start with MOODLE is to have an account on moodle cloud. An individual educator can create this account or an institution can have a moodle cloud space. After the prosperous registration on moodlecloud.org, an incipient site is engendered in which 5 tabs are available on the Home Page: Home, Dashboard, Calendar, Private Files and My courses. After the initial registration, MOODLE provides a hoard of features in order to give educators a personalized experience. They can go to the profile section and personalize the profile layout. The next step is registering the site by clicking on the site administration tab. The most important step in this process is Course creation. From the site administration tab-Courses section multiple options are available related to modules or courses.(Chourishi, 2012)To add a new course to Moodle, educators need to have either an Administrator, Course Creator or Manager rights. The generic steps to add a course on the platform are:<sup>[2]</sup>

- A. From the Site administration tab, select Courses then select Manage courses option and Categories sub-option.
- B. Click on the new course in the Category page.

- C. Select the Category in which the course content can be added.
- D. Click the "New course" option.
- E. Enter the Course setting, and then choose either to "Save and return" to go back to the course, or "Save and display" to go to the next screen.
- F. To add course material, Click on Proceed to course content. Once the course is designed the next step is to enroll users to the course. Those users can be Managers, Teachers, Students or non-editing teachers. There are multiple ways to add the participants:
- G. Users can sign up to the site themselves
- H. The admin creates accounts manually

Once the course is set and the participants are added to the course, the user list is updated in the enrolled students tab.

Dashboard displays the summary of the site created on moodle cloud which includes information about existing and upcoming courses, online users, Timeline, Badges and Private files from the registered account. Calendar is available in the moodle cloud environment that displays the information about various events, course timelines and deadlines for all the courses in the moodle cloud account.

### III. TOOLS IN MOODLE

Tools are divided into two parts:

Resources and Activities. (UNSW Sydney Teaching-Oriented to Moodle)

- 1) *Resources*: These can be used to present information to users or students or learners i.e. Study material and presentation formats for content delivery.<sup>[3]</sup>
- 2) *Activities*: These are the actions in Moodle which can be used to assessment and Evaluation purpose. Category-wise discussion of tools:<sup>[4]</sup>

a) *Resources*: (UNSW Sydney Teaching-Oriented to Moodle)

- *Book*: A Moodle book is similar to the concept of a book which contains multiple pages that contain main chapters and sub-chapters.
- *File*: A picture, a pdf document, a spreadsheet, a sound file, a video file uploaded on the moodle cloud as a resource material for learners.
- *Folder*: It can be used to organize files. A folder can also have subfolders and files and educators can upload the entire folder to the resource material.
- *IMS Content Package*: To make static material from other sources in the standard Integrated Management System content package format available for learners by including it in the course content.
- *Label*: A few displayed words or an image used to separate resources and activities in a topic section, a lengthy description or instructions can be termed as labels.
- *Page*: The learner sees a single, scrollable screen that an educator creates with the robust HTML editor which can be used for topic explanations.
- *URL*: Any web address containing the information about the topic can be used as a resource material. That type of material is termed as URL i.e. Uniform Resource Locator.

b) *Activities*: (scholar LMS)

- *Assignments*: A tool for creating gradable items and allowing learners to upload digital content in response. Students can enter assignment text directly, or submit essays, spreadsheets, presentations, web pages, photographs or graphics, or small audio and video clips.
- *Chat*: The Chat tool allows learners and educators to have real-time synchronous text-based discussion in an online chat room.
- *Choice*: A teacher asks a question and specifies a choice of multiple responses. Evaluation of student's understanding can be done using this tool.
- *Database*: With the Database activity, educators & learners can form a database containing entries relating to any topic. The format and structure of the entries can include various objects like images, files, URLs, numbers, texts etc.

- *Feedback*: Helpful in creating timely feedbacks for the course. Administrator can view responses in summary or analysis format, or by individual user. One can specify anonymous response. Feedback is one of 3 survey-type tools in Moodle.
- *Forum*: Allows participants to have asynchronous discussions. Educator and Learners can post messages to each other, and keep track of individual discussions.
- *Glossary*: Enables participants to create and maintain a list of definitions, like a dictionary. Glossaries can be created by interacting with students for contributing to terms and definitions.
- *Lesson*: Tutor can create learning units in which questions are asked in between and each correct answer brings up a new piece of information and a new question.
- *External Tool*: Participants can interact with Learning Tools Interoperability compliant learning resources and activities on other web sites. Those websites must be set up in the course prior.
- *Quiz*: Allows the teacher to design and set quiz tests. The quizzes that are created can contain various types of questions like MCQs, Audience poll etc. One can also allow students to re-take the quiz. Score calculation is done by Moodle.
- *SCORM*: Sharable Content Object Reference Model can be added as content to the MOODLE course. SCORM is a collection of specifications that enable accessibility and reusability of web-based learning content. (UNSW Sydney Teaching-Oriented to Moodle)
- *Survey*: For gathering data from students to help educators learn about their understanding and reflect on their own teaching.
- *Wiki*: A collection of Web pages collaboratively designed, beginning with home page which is editable by students. Also one can link more pages to that.
- *Workshop*: A peer review/peer assessment tool. It allows the educator defines components of assessment and evaluation or rubrics. Students submit their work and they evaluate peer's submissions. Grading is based on both their own submission and their effective assessment of their peers' work. Resources and Activities together make an interesting virtual teaching process which can bring tutors and learners across the globe on one platform and enable knowledge sharing in a comprehensive manner. Also it will be more attractive for 21st century learners and educators as it allows self-paced, innovative teaching learning which is analyzed in a research paper (Oproiu, G 2015)<sup>[5]</sup>

#### IV. CONCLUSION

It is found that though Traditional inculcation cannot be superseded by Moodle, it can be utilized as an interactive implement to keep the students engaged.

It can withal be considered as a resource directory for learners by educators. The challenges in adopting this way of edifying are availability of resources like internet connection, Educator's mindset and Lack of training.

Determinately, MOODLE can be utilized as an Edifying -Learning Interactive Virtual Platform which is utilize convivial, free open source. It can be efficiently utilized as edification implement if educators are convinced to adopt the innovative ways of edifying and are provided the congruous training for equipollent.

#### REFERENCES

- [1] Moodledocs. (n.d.). From MoodleDocs: [https://docs.moodle.org/39/en/Main\\_page](https://docs.moodle.org/39/en/Main_page)
- [2] Chourishi, D. &. (2012). Effective E-Learning through Moodle. JOUR
- [3] UNSW Sydney Teaching-Oriented to Moodle. (n.d.). From UNSW Sydney Teaching: <https://teaching.unsw.edu.au/moodle-tools>
- [4] Scholar LMS. (n.d.). From scholar LMS: <https://scholarlms.net/activities/>
- [5] Oproiu, G. (2015). A Study about Using E-learning Platform (Moodle) in University Teaching Process. Procedia -Social and Behavioral Sciences, (pp. 426-432).





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