

# **EFFECTIVENESS OF MOODLE LEARNING MANAGEMENT SYSTEM IN FACILITATING STUDENT- CENTRIC TEACHING-LEARNING- CASE STUDY OF SANATAN DHARMA COLLEGE, AMBALA CANTT.**

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## **ABSTRACT**

Innovative Pedagogy empowers the learner with latest skills & competencies to deal with a constantly changing landscape of educational system in this pandemic time. In this paper, we present a case study carried out at the Sanatan Dharma College, Ambala Cantt on the use of Moodle (E- learning Platform) as a Innovative pedagogical approach that have potential to enhance teaching skill and transform the learning process. Dataset for this study was collected based on analysis of content and a questionnaire applied to students and teachers of the Sanatan Dharma College, Ambala Cantt. The results of this case study depicts that Moodle has great potential but it is mainly used as a repository of materials. However, keen insights about improvement in this E-Learning platform has also been recommended by students and teachers of the Institution, so that we can work on those recommendations in future that will enhance the impact and use of Moodle for both students and teachers.

## **1. INTRODUCTION**

Innovation in pedagogical method of teaching-learning paradigm has attracted a great deal of attention in the education industry in recent years

especially during pandemic time. To impart quality education even during COVID time has posed great challenge so continuous innovation in pedagogy and in teaching- learning methods was the only solution to learning as well as teaching for both students and teachers respectively. It is commendable that India is moving forward on innovations, as the Global Innovation Index 2021 (World Intellectual Property Organization (WIPO)) has ranked India as the 46<sup>th</sup> most innovative nation in the world amongst 132 economies.

### **E- Learning Platform as a part of Innovative Pedagogy**

E- Learning Platform provides a range of configurable features, in order to allow the creation of effective online courses for various learning communities [1]. Piotrowski Approach suggests that [2], a system represented by an e-learning platform, provides integrated support for six different activities: creation, organization, delivery, communication, collaboration and assessment. Generally two types of LMS dominate the education industry, one is representing commercial solutions (such as Blackboard/WebCT) and other is representing open-source solutions (such as Moodle). Regardless the type, several studies revealed the existence of strong advantages on using e-learning platforms [3- 5], however, their adoption involves some challenges at institutional level as well as at individual level.

Concerning open-source solutions, there are some studies that identify the Moodle (Modular Object- Oriented Dynamic Learning Environment) as the most used platform in higher education, as well as the most easy to use [2, 7- 14]

### **Moodle**

Moodle is the most popular Learning Management System used Worldwide. Moodle is a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalized learning environments. Moodle provides a list of promising features like easy to use, Open source software, always up to date, laced with multilingual capabilities that makes it All-in-one E-Learning Platform. Some other features of Moodle include that it is highly flexible and fully customizable, Scalable to any size, robust, secure, private, extensive resources availability etc.

## Why E-Learning is important for HE (Higher Education)?

The sudden rise in the field of E-Learning is the result of a number of events, including the COVID- 19 pandemic and the internet era's revolution. All of these events prompted the search for a new form of learning, which is when online learning came to frame. A benefit of online learning is that it is not time-bound and can be scaled to fit your requirements. The major factor which has made this industry so huge is that it provides flexibility in learning and time whether you are gaining a new skill or upskill yourself.

### 1. METHODOLOGY

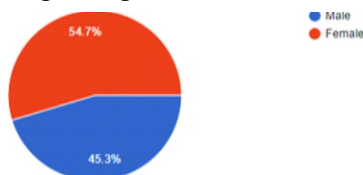
In this study the Moodle of the Sanatan Dharma College, Ambala Cantt was examined through a content analysis, complemented with a non-structured interview carried out with the responsible for the platform at the college. Afterwards, a detailed analysis has been carried out of Moodle' tools used by students from Sanatan Dharma College, Ambala Cantt. Dataset for this case study was collected through a Google form-based questionnaire developed on the basis of the literature review and validated through the referred interview, and applied to 181 students. The questionnaire consisted of the following sections:

Section 1 – Characterization of the students in terms of gender, class, year, stream, father's education, mother's education, number of siblings (brother/sister) studying in online mode.

Section 2 – Characterization of the Moodle platform in terms of accessing medium for online learning, internet access medium, frequency of access to Moodle, type of content frequently accessed on moodle, ease of access & navigation of moodle site. Moodle platform is also characterized in terms of Are courses shared on moodle were structured and well-organized, was the study material accessible 24\*7 hours to study at convenient time, were resources shared on moodle helped students to better understand the subject.

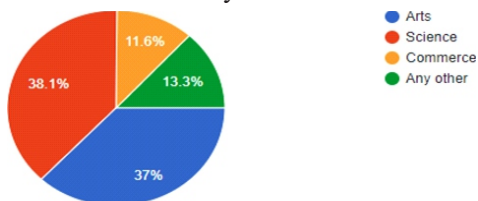
## RESULTS AND DISCUSSION

### Characterization of the participants

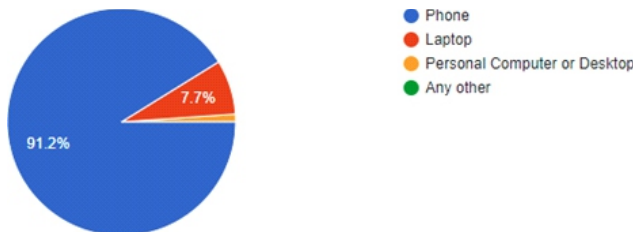


Out of total sample taken 54.7% were females and 45.3% males who have accessed moodle.

In accessing Moodle Science graduates are on top with 38.1% of total sample taken, 37% students are from Arts background, 11.6% from Commerce and 13.3% from Any other.

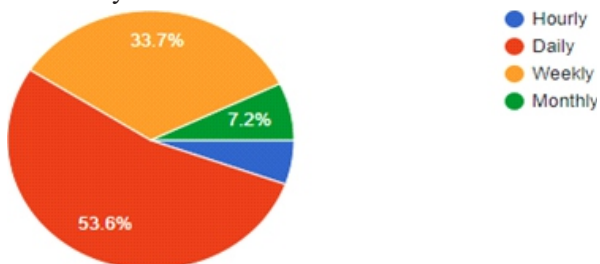


Regarding the devices used to access the Internet, 91.2% of the total students prefer Phone and 7.7% prefer Laptop for accessing internet.

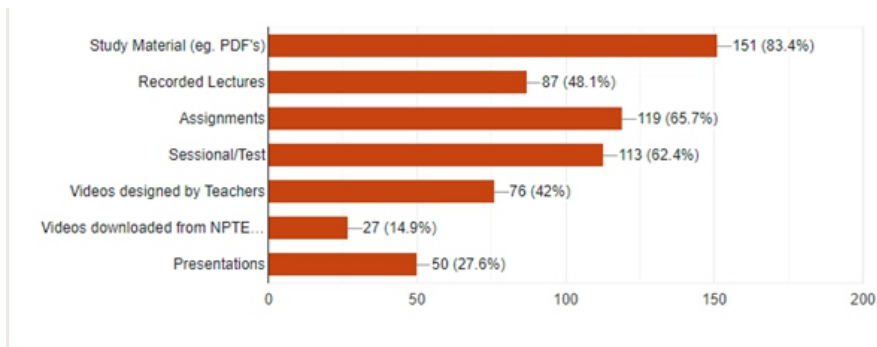


## CHARACTERIZATION OF THE GENERAL USE OF THE MOODLE PLATFORM

The use of the Moodle was analyzed through the frequency of access, 53.6% students agree that they access Moodle daily, 33.7% students admit that they access Moodle weekly.



Regarding the type of content frequently accessed on the Moodle by students, it can be seen that 83.4% of the students mostly use Moodle to access PDF of study material.



These results can be interpreted as the Moodle being mainly used as a repository of materials and information.

Analysis of results obtained from data collected from students: -

What students like most in Moodle based learning?

- 24\*7 access of material.
  - Availability of complete course content at one place.
  - Course content is structured and well-organized.
  - Hassle free submission of assignments without actually going to college.
- What are the main challenges faced by students in Moodle based learning?

- Students agree that they mainly faced the network issue.
- Students found submission of larger pdf files quite difficult.
- No face to face interaction with teachers.

Suggestions given by students to improve moodle based learning: -

- Students suggested that notification feature should be there when any kind of material or assignment is uploaded on moodle.
- Size to upload pdf file should be increased.
- More value added courses should be provided in addition to core courses through moodle platform.

## CONCLUSION AND FUTURE STUDIES

Main functionalities and tools available in the Moodle platform have been analyzed in this paper and their use at the Sanatan Dharma College, Ambala

Cantt. The standard Moodle platform of Sanatan Dharma College, Ambala Cantt contains some of the main tools, like Assignments, Chats, Forums, News and Quiz/Survey. The analysis of the students' answers to the applied questionnaire revealed that the most mentioned purpose of the use of the Moodle were 'Download materials' and 'Deliver assignments'. As future works, we should consider improving moodle platform by working on the suggestions that students have provided as feedback.

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