News at a Glance

Learning Management System (LMS): An Effective Solution for Online Teaching
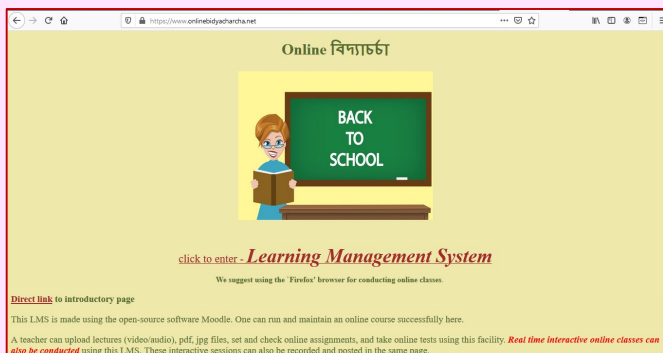
Deployment of technology in educational institutes has long history. However, in last 10-12 years online teaching learning practices have become quite common (foreign universities offer online degree too). In our country also virtual learning became operational since 2007-08 through National Programme for Technology Enhanced Learning (NPTEL). Since then Govt. of India has taken many initiatives for expanding quality education using technological innovations. To name a few we can recall virtual labs (https://www.vlab.co.in/), e-PG Pathshala, and the latest one is SWAYAM (since 2016). In SWAYAM one can take any course at the comfort of his/her house in online mode and can get the pass certificate of that course after successfully qualifying in the proctored examination conducted after each semester. There are plenty of courses available now in the SWAYAM platform. Moreover, there are several DTH TV (https://www.swayamprabha.gov.in/) channels and Radio stations for spreading education through technology. However, we do not see much of those practices at the university level. Outbreak of pandemic Covid19 made us feel the necessity of preparing ourselves for catering our students in online mode. UGC has taken many initiatives through HRDCs to make people aware regarding online teaching learning process. However, the practice of on-line teaching-learning was not quite common. Suddenly after Covid19 lock-down all academics are trying their bests to teach their students using all sorts of technological gadgets and means, starting from mobile phones to desktops/laptops. Use of WhatsApp, e-mail, and video conferencing apps like Google-Meet, Zoom, Cisco-Webex for interactive classes etc. may be talked about. But still they are struggling with processing of assignments, taking online exams, and sharing study materials in organized manner. Mobiles are getting hanged, keeping track of student communications, email attachments are becoming unmanageable. It may be mentioned that recently UGC has instructed all Higher Education Institutions (HEIs) to conduct online/offline/blended tests for the last even semester examinations. Therefore, taking online exam is again an important event to be taken care of.

Interestingly, it may be noted that all sorts of classroom or course related activities can be done very nicely using well-organized integrated software. Basically, those are called Learning Management System (LMS). Like all journals processes research manuscripts using editorial software (manuscript central, editorial manager etc). If one institute adopts one LMS then continuing and maintaining teaching- learning and evaluation even issuing of certificates also will become very systematic and easy to operate in online
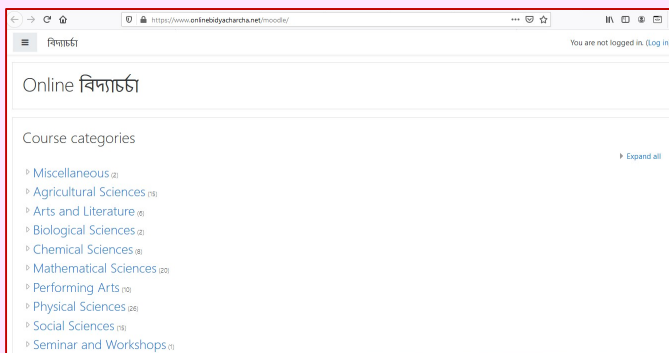
mode. LMS is the technological facility for pursuing teaching-learning processes virtually. That is why sometimes those are called virtual learning environments (VLE) or Course Management System (CMS).

Several LMSs are available in the market namely Moodle, D2L, Canvas, Schoology, Edmodo, Brightshare, Blackboard etc. Unfortunately, most of the LMSs are proprietary in nature and ask for hefty amount of money for institutional use. We all know that fund crunch in HEIs is a serious problem and spending money for VLEs is highly unlikely. But Covid19 has taught us that we need to think over introducing LMSs for enhancing teaching practices and cope-up with the unusual situation like Covid19. At this point we may think of open source LMS. It would serve the purpose of LMS and save the money as well. One good LMS should have some desirable characteristics. It should be free and fully controllable by the HEI. Accessibility through mobile (including mobile app) must be possible. It should have the provision of accepting independently developed (external) tools commonly known as plug-ins, community support/help, and usage analytics. It should be operational in offline mode too. Moodle, Edmodo are two opensource LMS. From our experience as firsthand user I can say that Moodle could be one of the best solutions in this regard. All these features are available in Moodle. It may be worthy to mention that UGC in its Evaluation Reform in HEIs Recommendations suggested the use of Moodle, Edmodo for all classroom activities (https://www.ugc.ac.in/e-book/EVALUATION%20ENGLISH/mobile/index.html). Looking at those pluses we have prepared one LMS using Moodle and named it https://onlinebidyacharcha.net .
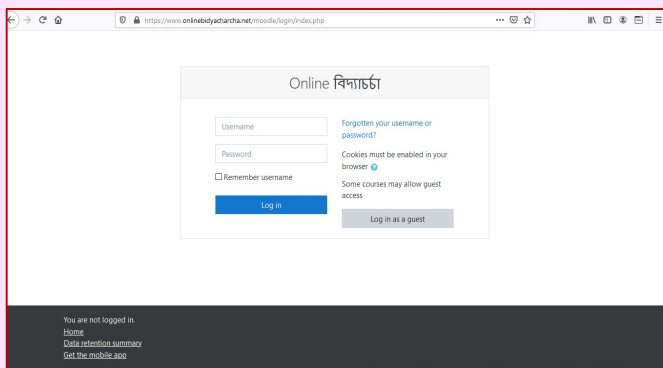
It may be thought of like a virtual school. There are several categories (departments) of courses like Physical Sciences, Chemical Sciences, Performing Arts, Agricultural Sciences and many more. Under each category there are several subjects or courses. All teachers and students must be registered in the system using their valid email ids. The second step is enrolling a user into a course either as a student or as a teacher. Both the process can be done by the system admin. However, the system admin can register all the users and the rest can be performed by the teacher or the student. Self-registration (sign-up) and enrollment is also possible, though still now that is not activated yet however, can be done anytime.
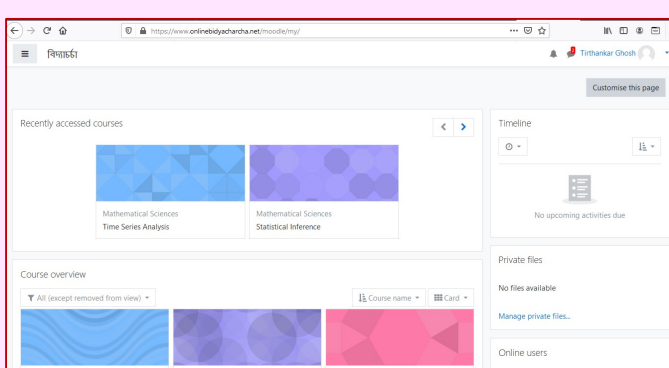

(a) Homepage of the LMS

(b) List of course categories

(c) Log-in page

(d) Dash board available after log-in

Fig. 1: Some screenshots of the LMS pages

In this facility a teacher can have a course with many students (there is no cap on students' number in a course). Then the teacher can take interactive video classes (with recording option), share study materials (including audios, videos), take online tests (including descriptive questions) and process assignments using his/her virtual classroom. There are some more options to exercise like virtual programming lab (useful for Physics, Chemistry, Statistics, and Mathematics etc. students), guided lessons (kind of automatic interactive lesson through complex logic), and simulated lab experiments for Physics/Chemistry/Biological Sciences students. On https://onlinebidyacharcha.net there are several options for conducting video classes like Google-Meet, Big Blue Button (BBB), Jitsi and Zoom. We are working on adding Cisco Webex available in that suite . There are two options of communication for both teacher and students; one is message option (available at top-right corner of the user page) another is using the discussion forum in the class. All messages sent through this facility gets delivered in the recipients email inbox. Hence there is no chance of missing any communication. Question bank gets generated automatically in the system. Students can provide their feedback on the same course page. LMS of an institution may be called as its own SWAYAM platform. Some screenshots of teachers' activity in the LMS are shown here.
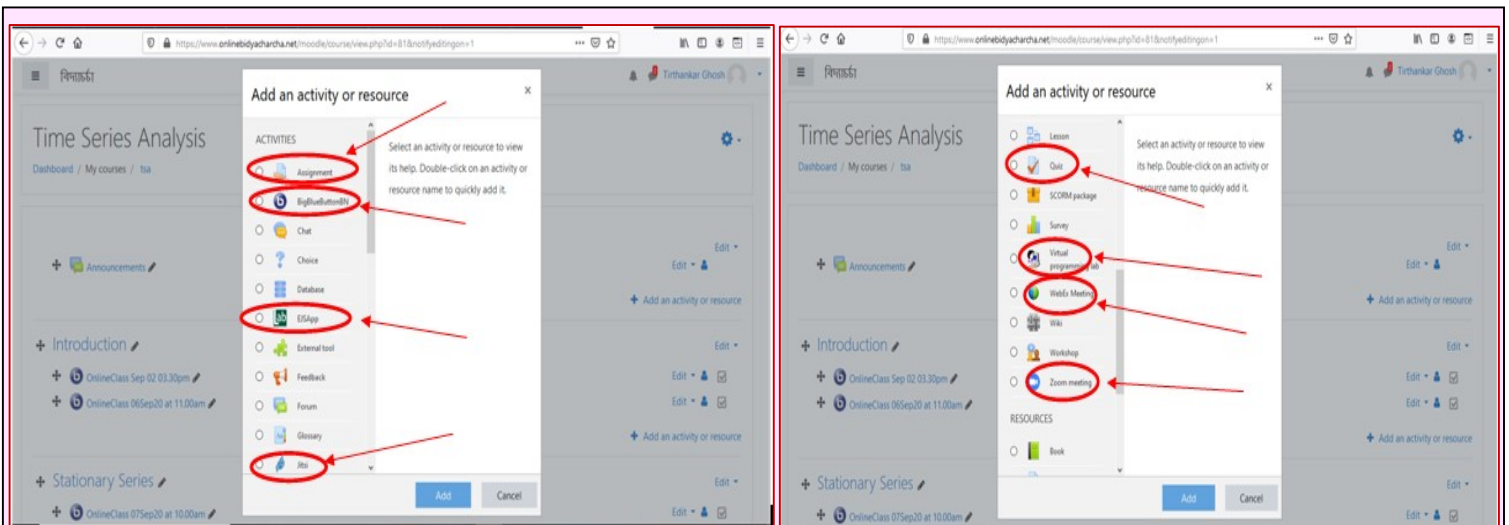
Fig.2: Different Activities available in the LMS https://onlinebidyacharcha.net

In https://onlinebidyacharcha.net LMS two open source software's are used for live interactive classes. Those are Big Blue Button (BBB) and Jitsi. BBB is developed for online teaching. It is used across the world and LMSs (Canvas, Moodle, Sakai etc.). Features of this video app are

Recording of the sessions, **White board** for real classroom experience, Screen sharing, Audio, Webcam, **Uploading of presentations or slides and one can annotate those slides using mouse or digital pen**, Chat (public and private), **Live Captions** (become subtitles in the recordings), **Breakout rooms** (i.e. during live class students can be grouped an teacher can visit each group for separate discussions), **Screen Reader for visually disable participants**, Sharing external videos, Emojis for raising
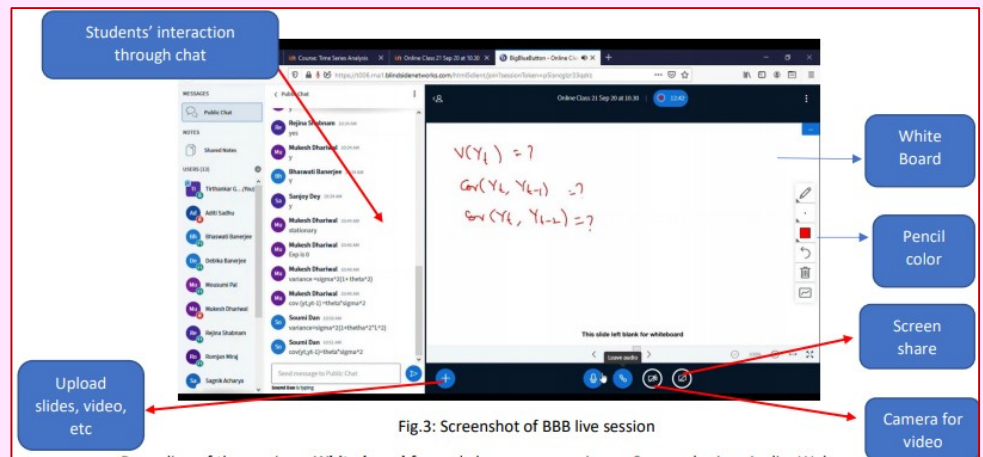

Fig.3: Screenshot of BBB live session

hands etc. Many of the above features are not available in widely used video apps (Google Meet, Zoom, Webex, Jitsi etc.). Moreover, other than Jitsi all are proprietary software means we need to pay for using them. Though most of them provides free access for less than one hour. Joining the video meeting are as usual according to the application applied for it. Generally, following screen instructions one can join the interactive video conference very easily. In the activity list it can be shown that Zoom Meetings, Jitsi and Webex are included in the LMS. Accessing Google-Meet and Microsoft Team Meetings are done using a different channel and those cannot be seen in the activity list. Jitsi is suitable for holding online video conference like Google-Meet. Here the activity '**Quiz**' is for conducting online tests, '**Assignment**' is for homework or assignments. '**VPL**' is for the activity Virtual Programming Lab utility of which has been mentioned earlier.

To date on https://onlinebidyacharcha.net there are more than 80 (eighty) courses are running and total number of users are more than 1500. More than 28 online tests have been carried out where more than 20 teachers were involved. Many teachers reported that they have conducted online tests which included descriptive questions as well. Detail operational procedure cannot be described in this small communication. However, this must be mentioned that if this LMS is used there will be no need of accessing any other facility for continuing regular academic activities. In fact, plagiarism check and library access (online) is also possible using the same LMS. It is reality that there are many limitations like non-availability of internet or not having proper smart device etc. Despite of that it cannot be denied that due to technological means academic activities are continuing at least as far as practicable. Had this Covid19 occurred 15 years back, I fear academic activities would have completely stopped then. However, it may be claimed that use of LMS could be helpful to every stakeholder and use of that should be promoted from all corners of academic fraternity. However, I feel, LMS should be taken as a support system of mainstream academic programs.

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SOME RECENT ACTIVITIES:

➤ **Observation of Teachers' Day:** Teachers day has been observed at Central Library to pay tribute to the great teacher Dr Sarvepalli Radhakrishnan. 5th September is the birth anniversary of a great teacher **Dr Sarvepalli Radhakrishnan**, who was a staunch believer of education and was a well-known diplomat, scholar, the President of India and above all, a teacher.

➤ **Demonstration Program on E-resources:** As part of procurement of e-resources, VBLN has organized demonstration program on e-resources of 26 world class publishers/aggregators during 22-25 September 2020 from 11am to 1.30pm.

- ➢ **Webinar:** Webinar on "Importance of Intellectual Property Rights for Academic Institutions" jointly organized by Internal Quality Assurance Cell (IQAC) and Visva-Bharati Library Network on 21 September 2020. Inaugural Speech has been delivered by Dr Pratibha Singh, Deputy Adviser, NAAC, New Delhi and speech the invited speech on the theme has been delivered by Dr Ashiwini Siwal, Associate Professor in IP and IT Laws, Faculty of Law, University of Delhi and Director, LC-II Enterpreneural Law Clinic. The session has been chaired by Prof. Rup Kumar Kar, Professor Dept. Of Botany and Director, IQAC, Visva-Bhaarti. The session has been hosted by Ms. Sabahat Nausheen and Sri Sujit Kujur while 121 participants from all over India.

- ➢ **Documents / Article Delivery Services:** During the month 09 no. of soft copies of the articles have been collected and delivered through mail as requested by the academics/scholars.

- ➢ **Exhibition and Celebration of Important Days at Reference Section, Central Library:** Organized three special exhibitions of books and allied materials including quotations and photographs to celebrate;
  - a) Teachers Day to mark 133rd birthday of Dr S. Radhakrishnan's on 5 September 2020
  - b) 128th anniversary of Swami Vivekananda's Chicago Speech on 11 September 2020
  - c) Birthday of the Ishwar Chandra Vidyasagar on 26 September 2019.

- ➢ **Similarity Checking Through URKUND Software:** On request from the academics 41 articles/Files have been checked through URKUND software and report has been forwarded through mail.

- ➢ **Online Ph.D. Open Viva Voce:** as discussed in a meeting and as instructed by the authority, VBLN has take-up the initiative to offer necessary technical-support for arranging Online Ph.D. Open Viva Voce on different dates. Altogether, two candidates (RSSDD, Sangit Bhavana 07/09, LLL&E, PSV (14/09) have appeared in the online viva to complete the Ph.D. program in this pandemic day when viva in physical mode is not possible.

- ➢ **Remote Access Login/Password:** On request from the academics 04 new Remote Access including Discovery Services have been opened and on request around 12 existing expired accounts have been renewed for their accessibility. The name of the Remote Access platform is OpenAthens from the Ebsco Information Services.

PERSONALIA:

- ➢ **Shri Sujit Kujur** has been awarded Ph. D. degree on dated 25.08.2020 under the supervision of Dr Arun Modak, Department of Library & Information Science, Sri Satya Sai University of Technology & Medical Sciences (SSSUTMS), Sehore (MP). The title of the thesis is "***Influence of IT Related Research Paper in Journal of Library & Information Science".***

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IMPORTANT LINKS:

- ➢ **National Academic Depository (NAD) (https://nad.gov.in/index.html):** The vision of National Academic Depository (NAD) is born out of an initiative to provide an online store house of all academic awards. National Academic Depository (NAD) is a 24X7 online store house of all academic awards viz.certificates, diplomas, degrees, mark-sheets etc. duly digitised and lodged by academic institutions / boards / eligibility assessment bodies. NAD not only ensures easy access to and retrieval of an academic award but also validates and guarantees its authenticity and safe storage.

- ➢ **INDIA CODE (https://www.indiacode.nic.in/about.jsp):** It is a database of all Central enactments which are in force and their subordinate legislations made from time to time. With the help of this system, retrieving of any Central Act and its relevant subordinate legislations of one's interest in an up-to-date form has been simplified and made extremely user-friendly and accessible at push of few buttons. It also contains Legislations enacted by the States and Union Territory Administrations along with their relevant subordinate legislations.

CONFERENCES/SEMINARS:

- ➢ International Conference on Knowledge Organisation in Academic Libraries (I-KOAL 2020) during October 16, 2020 at 9am to October 17, 2020 at 5pm Organized By: Library Professionals Association (LPA), New Delhi and Department of Library and Information Science, Tumkur University, Tumakuru. More details: http://www.lpaindia.in

- ➢ One Week Workshop on Website Design and Development: **Dates: October 19-25, 2020; Time: 6:00 P.M. – 9:00 P.M. *Organized by:*** LIS Links; **Mode of Workshop:** Online Only. More details: http://www.lislinks.com/events/one-week-workshop-on-website-design-and-development

New Arrivals (Books and Periodicals)
   Books(click)
   Journals (click)

Glimpses of Teachers' Day Celebration

Glimpses of Webinar on Intellectual Property Rights by IQAC, VB and VBLN

Glimpses of Demonstration on E-resources