Designing a Prototype E-learning Programme for Department of Library and Information Science, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

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Abstract: Online MLISc@DLISc, RTMNU, a Prototype web based modular and interactive learning system, has been developed which aims to produce a E-Learning Environment (VLE) for Library and Information Science course. The paper propose a set up of VLE support system with traditional learning for LISc education in the Department of Library and Information Science, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur by integrating learning object and institutional repository in Moodle.

Keywords: Virtual Learning, Online learning, E-learning, Nagpur, Library and Information Science, Moodle

I. Introduction

As an integral part of higher education, Information and Communication Technology (ICT) has made positive inroads into learning and education. This is evident in a number of studies indicating that integration of ICT can have positive effects on learning outcomes. These studies, however, focused mainly on young adult learners. Therefore, the study findings may not be useful enough as a basis to extrapolate to older working learners, part-time learners and other student groups. It follows that universities with intakes of diverse profiles would need to survey their own learners to better understand their abilities, experiences and perceptions of use of ICT in learning and education. A study on ICT towards learning is even more necessary for the open and distance learning (ODL) institutions as their populations are more diverse than those of the traditional campus-based institutions. In addition, there is a lack of research knowledge of ICT usage among older learners.

Just as in other ODL institutions, working adult learners require a more flexible system of attending tutorials to balance family, social and work priorities and commitments. Under this challenging condition, working adult learners would require ICT to aid learning whenever they are not able to attend face-to-face tutorials. Moreover, these adult learners who are regularly exposed for increasing demands of society would also realize the need to equip themselves with ICT knowledge and skills. We also need the ICT as a tool to reach out effectively to its distributed learners. In response to the various demands for ICT usage, the Internet together with other forms of technology is adopted as one of the main instructional and learning means to accommodate the pedagogical shift from the teacher-dominated role to the learner-centred role. In particular, Internet is adopted to enhance time-tableing of courses, assessment results, tutor feedback to learners, and many others.

ICT is also used to deliver the academic components of a course by making it more flexible. E-learning, which is one of the three components of delivery mode, is made available twenty four hours, seven days a week through the Learning Management System which integrates e-mails, discussion forums, chats etc., provides seamless support for learners. It serves as an e-learning platform for interaction among the university community members, which include learners, tutors, subject matter experts, academic and non-academic staff.

II. Objectives of Prototype Designing of E-learning Programme

Online MLISc@DLISc, RTMNU, a Prototype web based modular and interactive learning system, is aims to produce a E-Learning Environment (VLE) for Library and Information Science course. Following objectives were framed:

- To propose a set up of VLE support system with traditional learning for LISc education in the DLISc, RTMNU, Nagpur.
To integrate learning object and institutional repository in Moodle.
To acquaint users to try Moodle for themselves by creating online activities such as assignments, quizzes, forums, choices and to manage course content.

III. Facilities in E-Learning Environment:

A e-learning environment (ELE) is a set of teaching and learning tools designed to enhance a student's learning experience by including computers and the Internet in the learning process. The principal components of a VLE package include curriculum mapping, student tracking, online support for both teachers and students, electronic communication (e-mail, threaded discussions, chat, Web publishing), and Internet links to outside curriculum resources. In general, VLE users are assigned either a teacher ID or a student ID. The teacher sees what a student sees, but the teacher has additional user rights to create or modify curriculum content and track student performance. There are a number of commercial VLE software packages available, including Blackboard, WebCT, Lotus Learning Space, and COSE. But for this prototype designing an open source content management system Moodle is installed and attempt has been made to run various modules.

<table>
<thead>
<tr>
<th>VLE (Virtual Learning Environment)</th>
<th>TLE (Traditional Learning Environment)</th>
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<tbody>
<tr>
<td>Learning materials and resources available within the system</td>
<td>Resources available within a library or information centre unit</td>
</tr>
<tr>
<td>Online assessment</td>
<td>Examinations</td>
</tr>
<tr>
<td>User driven time and learning schedule</td>
<td>Institute driven time and learning schedule, Classrooms</td>
</tr>
<tr>
<td>Discussion forum, chat room, video conference</td>
<td>Registers, tutor, records etc</td>
</tr>
<tr>
<td>Monitoring and tracking system</td>
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IV. Methodology

This is a product development research. The product i.e. a moodle (Modular object oriented dynamic learning environment) based e-learning module will be developed. For developing this product, Moodle, a open source software was downloaded and installed. In the next step, course content for the 'Information Technology Basis' paper of the MLISc-I Semester will be designed. Various modules binging with enrollment, assignment, blogs, wikis and question bank will be developed. Accordingly the course will be developed and necessary rights and permission will be set for the students and the teachers.

V. Moodle as VLE

Moodle (Modular Object – Oriented Dynamic Learning Environment) is a free source e – learning software platform. It was originally developed by Martin Dougiamas to help educators to create online courses with a focus on interaction and collaborative construction of content, and is in continual evolution.

A. Features of Moodle are:
- Assignment submission
- Discussion forum
- Files download
- Grading
- Moodle instant messages
- Online calendar
- Online news and announcement (College and course level)
- Online quiz
- Wiki

B. Development of course

Moodle provides a number of options for general format of the course, one can choose to order the course chronologically by week, conceptually by topic or socially with a big forum as the central organizing principle. The course format one can choose are : LAMS(Learning Activity Management System), SCORM
C. **Enrollment of Students**

The administrator will be given full rights of the software. He will be entrusted with a role of enrollment of the students. Once the enrollment of the students will completed they will be given orientation of the software and will made fully aware about the working of the software and their rights as far as Moodle is concerned. They will provide with unique login ID and password to keep close watch on the activities carried out by the individual student.

D. **Blogs**

Blogs have been around for years. But recently they have gained popularity. Some of the experts have referred blogs as a web – based journals. They are supposed to be one of the most powerful tool to enable collaborative learning process. Today many of the institution has developed blogs and has kept open for the students to have discussion on a particular topic. Moodle supports for the creation of blog, hence it was decided to utilize these facility as a question and answer board. The students were allowed to open discussion on the topics of their interest from the LIS. It has provided an opportunity for the students to discuss topics outside the classrooms.

E. **Online Assignments**

The students will be provided with the online assignments also they will be instructed to submit their assignment online only. The students will be supposed to login into Moodle by using their ID and password, accordingly it was assessed by the teacher.

F. **Wiki’s**

A wiki is a web technology that allows a user to allows anyone to edit. It promotes collaboration and knowledge sharing, fosters feeling of ownership and increases participation. Educators has recently explored its usefulness in promoting deeper learning and its integration of learning experiences in inside and outside the class room. They too have realized that wikis facilitate collaborative finding, shaping, and sharing of knowledge, as well as communication.

G. **Question Bank**

In fulfill the requirements of students need of the old questions papers and to give idea to the students what type of question generally appears the question bank was developed. The question bank generally has all types of question ranging from long essay type to short and objective types of questions.

H. **Reports**

It was important to keep check on the activities of the student. Accordingly fortnightly report of each student will be generated which used to highlight what different activities he has performed in this learning environment.
Screenshot 7.1 shows the home page of DLISc, RTMNU, Nagpur. The home page consists of various links on the left hand side Navigation box which include Home-Faculty, contact, events and syllabus.

Screenshot No. 7.2: Faculty Members of Department of Library and Information Science, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

Screenshot 7.2 shows the permanent faculty members of the department with their photograph and biodata.

Screenshot No. 7.3 : Syllabus and Guidelines to conduct the Examination

Screenshot 7.3 display information about the guideline and course by clicking the option Syllabus. It will give detail information of the syllabus, marks distribution, unitization.

Screenshot 7.4 shows events organized by the department, the current event were displayed, it can be updated time to time.

Screenshot No. 7.4: Events organized in the Department of Library & Information Science

Screenshot No. 7.5: Login as a Faculty Members for delivering Lecture & Assignment

Screenshot 7.5 shows the login as faculty member for delivering lecture assignment, projects, etc. on clicking faculty the Screen 5 will appeared.

Screenshot No. 7.6: Navigation Link for adding Resources & Assignments

Screenshot 7.6 shows adding resources and assignments. It shows about foundation of library and information science I paper's lecture assignments topic, add a resource and add on activity.

Screenshot No. 7.7: Assignment Uploading by the Faculty Member

Screenshot 7.7 shows the uploading of Assignment by the subject and topic wise faculty members.
Screenshot No. 7.8: Login as Student

Screenshot 7.8 is students homepage, login as a student when student will be enrolled for the course than he/she will get ID for log-in.

Screenshot No. 7.9: Login in My Course for MLISc

Screenshot 7.9 shows student's login for my course for MLISc. It includes, My home, Site page, My profile, My courses.

Screenshot No. 7.10: Students viewing Academic Calendar

Screenshot 7.10 shows Academic Calendar. It also shows notification for student made available. The whole months activity will be notified to the student.

Screenshot No. 7.11: Assignment Submission by the Student

Screenshot 7.11 shows assignment submission by the student, if any student unable to submit the assignment will have other facility.

Screenshot No. 7.12: Assignment Modification by the Student

Screenshot 7.12 shows assignment can be modified.

Screenshot No. 7.13: Assignment Modification by the Student

Screenshot 7.13 shows grading summary after checking the Assignment by the teacher, it will generate automatically.

Screenshot No. 7.14: Feedback of Teachers for the Students

Screenshot 7.14 shows the feedback of teacher for the student if any student will not submitted the
assignment, the teacher will give not on it or if submitted report will be given.

Screenshot No. 7.15: Creation of Users Report
Screenshot 7.15 shows the User Report after the academic activities user can check the report.

Screenshot No. 7.16: Course Setting by the Administrator
Screenshot 7.16 shows about the course setting. It will be done by Administrator. Administrator has authority to set all this regarding course.

Screenshot No. 7.17: Creation of Blog Entry
Screenshot 7.17 shows that moodle supports for creation of blog. With the blog open discussion on the topic can be done.

Screenshot No. 7.18: Creation of Entry in Wiki
Screenshot 7.18 shows the Wikis creation. Wiki is a web technology that allows a user to allow anyone to edit, it promotes knowledge sharing. Moodle supports for this with this interaction between students and faculty member happens

VI. Conclusion

E-learning as a teaching-learning mechanism offers tremendous opportunities for learning beyond boundaries. Using e-learning an active teacher can reach to thousands of learners. Similarly, the individual learner gets opportunity to reach to the content delivered to him, seek further advice and communicate his thoughts back to the teacher. The teacher in turn can know to what extent his objective sure has been achieved and what more is to be done to improve students learning. The e-learning modules imparted through the Moodle will also help enable students, teachers and other agencies interested in education to develop learning material collaboratively. Content created through medias like wikis enhances quality of the content. Such Moodle-based e-learning programmes enable teachers to use multiple teaching tools like question bank, assignments, feedback, etc. This certainly enriches students learning experience. This module, could be adapted for other subjects also. The Department of Library & Information Science should take the initiative to implement the e-learning programme to enhance the greater visibility and to provide IT based skilled among the students to prove in the LIS job market.

References