Research Paper

Learning Management System for e-learning

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Introduction
E-learning is seen as offering solution to several challenges facing human. These include the move towards lifelong learning, with its ongoing demand for continuous professional development, and the drive to widen participation. These challenges come at a time of increasing pressure on resources and the increasing diversity in the student population and their modes of attendance including learning. Effective e-learning is a team effort which will require collaboration with a range of colleagues including librarians, support staff, learning technologists and educational developers. Support can be found at institutional and national levels and it is available in a variety of forms. Everyone has different levels of technical ability.

These are technically competent, to be interested and skill in writing web pages in html, java and JavaScript, creating multimedia resources which may involve the use of paint, graphics, drawing and animation packages, digital photography and image manipulation and procession digital video and sound creation and editing. Educational institution is focused on this issue extensively. Teaching style has been recognized as a media that allows learning to be successful. It can stimulate the interest of the students as well. Needs and differences between individuals are recognized in this mode of learning. Therefore, a system that helps to facilitate by the knowledge content of each course exercises and tests into a computer without a lesson or to design their own systems. This is learning management system (Learning Management System: LMS).

Concept of Learning Management System (LMS)
A Learning Management System (LMS) is software that automates the administration of training events. All Learning Management Systems manage the log-in of registers users, manage course catalogs, record data from learners, and provide reports to management. There used to be a distinction between Learning Management Systems and more powerful Integrated Learning Management Systems. That distinction has now disappeared. The term Learning Management System is now used to describe a wide range of applications that track student training and may or may not include functions such as:
·\Authoring
·Classroom management
·Competency management
·Knowledge management
·Certification or compliance training
·Personalization
·Mentoring
·Chat
·Discussion boards

Objectives of LMS
A learning management system (LMS) is a software application or Web-based technology used to plan, implement, and assess a specific learning process. Typically, a learning management system provides an instructor with a way to create and deliver content, monitor student participation, and assess student performance. A learning management system may also provide students with the ability to use interactive features such as threaded discussions, video conferencing, and discussion forums.

Structure of LMs
The composition of the LMS is composed of five parts:
· Course Management is divided into three groups of users levels that of student, teacher, and administrators. Learner can log on from anywhere at any time through the Internet. The user and the system can support an unlimited number of lessons. It depends on hardware / software used and the system can support the full format.
· Content management system consists of tools to help create the content. The system can work well if the lessons are the text - based and lessons are in media streams.
· Test and Evaluation System has a set of questions by a random test. It is a timed test. It has test automation solution with statistics, scores and statistics of attendance of students.
· Course Tools are tool. The communication between the students - teachers and students - who include a web board. The history of the chat room can keep them linked and connected for learning.
· Data Management System includes a file management system. The teachers have set the lessons in their own storage space. The area is set by the administrator.

Tools for LMS
LMS is a solution that provides design, deployment and management of educational and training services through different context and media, Internet, Intranet or extranets, CD-ROMs, diskettes, instructor led courses or other media can be used to offer a service to the employees. The solution will however not be a replacement for traditional training, but a supporting tool, which will help organizations to develop and structure their know-how, competencies and knowledge communities and networks. The LMS must enable administrators to manage user registrations and profiles, define roles, set curricula, chart certification paths, assign tutors, author courses, manage content, and administer internal budgets, user payments, and charge backs. Administrators need complete access to the

training database, enabling them to create standard and customized reports on individual and group performance. Reports should be scalable to include the entire workforce. The system should also be able to build schedules for learners, instructors, and classrooms. Most important, all features should be manageable using automated, user-friendly interfaces. In addition, the system should be able to identify employees who need a particular course and tell them how it fits into their overall career path, when it's available, how it's available (classroom, online, CD-ROM), if there are prerequisites, and when and how they can fulfill those prerequisites. Once learners complete a course, the LMS can administer tests based on proficiency requirements, report test results, and recommend next steps. In that capacity, LMSs are instrumental in assuring that organizations meet rigid certification requirements in such vertical markets as healthcare, finance, and government.

Features of LMS
LMS should be able to the following:
·   Centralize and automate administration
·   Use self-service and self-guided services
·   Assemble and deliver learning content rapidly
·   Consolidate training initiatives on a scalable web-based platform
·   Support portability and standards
·   Personalize content and enable knowledge reuse
Designing for the teacher of E-learning the following important features should be kept in mind:
-        The Online Syllabus
-        Personal Home Pages
-        Interactivity
-        Assignments
-        Announcements
-        Testing
-        Course Management
-        Content
-        Managing cognitive load
-        Dividing each tutorial lesson into segments
-        Web-based tutorial
The types of new skills teachers may have to acquire include:
-        Resource discovery, through portals, gateways and search engines
-        Making resources available in a variety of accessible formats
-        Providing feedback to students
-        Devising, implementing and managing online tasks
-        Blending forms of face-to-face and online learning
-        Implementing computer aided and computer manage assessment
-        Authoring digital resources
-        Moderating online discussions
-        Enabling students to upload digital resources
-        Checking copyright of externally sourced resources
-        Helping students develop appropriate e-learning skills and strategies, including good academic practice
-        Assuring the quality of online resource
Role of Teachers & Student in LMS
1.   The role of the teacher;
-        Gain an understanding of e-learning technologies and their potential to enhance student learning.
-        Set the use of these technologies within an institutional context.

-        Make informed choices as to how student can embed e-learning within their own practice.
-        Identify and establish appropriate partnerships essential to implementing effective e-learning
2.Learner or Student
-        Learner can choose the subjects to rest.
-        Learners learn on their own place and time restrictions learners can learn anywhere and anytime.
-        Interaction with the instructor and the student group is continuous
-        A measurement tool for learning is available
-        LMS is designed to have a compelling story in respect of e-learning
-        Learners can keep the history lessons and certified results of the study.
-        Learners can be facilitated with learning tools such as calendar notes.

Application of LMS
 A learning management system (LMS) is an application that provides a comprehensive set of tools for educators to manage learning resources, administrative functions, assessments, and grading. Some educators argue that because of evolving Web 2.0 applications, students can be better served by an LMS , a toolbox of web resources that might include social bookmarking tools, document sharing applications, social networking sites, timeline tools, and media options available in the cloud. Underlying this approach is the belief that students should become more familiar with today's technology tools because these skills will be useful in the workplace. As a result, some institutions have begun to offer LMS alternatives, and some instructors are using these options to support their students' learning. The framework of an LMS alternative may offer the user a coordinating hub with a dashboard or other interface that gives easy access to selected web-based tools.

 LMS span a wide range of tools and functions. One option might be a complex system built in-house at a college or university, designed to perform many of the functions of a traditional LMS while giving access to outside applications. Another might be a mash up of web applications assembled by an individual instructor and hosted from a blog platform or a social networking site. The tools that faculty members select as LMS are typically free or low cost, easy to learn and use, and robust enough to support students and faculty without suffering from service outages or other glitches. In such a design, students could select from among the proffered applications to complete their assignments.

E-learning
        E-learning is an abbreviation of the term electronic learning. Electronic learning in its literal meaning stands for the type of learning carried out, facilitated of supported by some or the other electronic gadgets, media or resources. It is quite a broader meaning of the term e-learning. Judging in this sense, the learning facilitated by the use of any electronic media or means like microphones and listening devices or audio and video-tapes can be terms as e-learning. E-learning, however, is not taken is such generalized sense. Although, in general, it may refer to all types of learning facilitated and supported through the use of information   and communication technology, yet in real practical sense, its use is limited and associated nowadays with the field of advanced learning technology.

E-learning may call for the services of the advanced electronic information and communication media and means like CD-ROMs and DVDs, teleconferencing, video-conferencing and computer based conferencing, e-mail, live chat, surfing of the Internet and Web browsing, on-line reference libraries, video game-style simulation, customized e-learning courses, and Web blogs. Indentified is this way, e-learning may be taken as an electronically carried out learning facilitated and supported by the use of advance learning technology particularly calling for the services of computers, networking and multimedia.

Application of e-learning by using LMS

LMS is a system of teaching and learning through the Internet. LMS also provides facilities to teachers, students and administrators. Teachers can put up a website, content, and teaching courses with ease. Students can access. Content and activities via the web students and teachers can communicate through the system as it provides communication tools such as Email, Chat and Web board is also available. The key element is to store the data learning activities of students on the system. The instructor is enabled to analyze to monitor and evaluate teaching the course effectively.

LMS is an important system in the e-learning. It acts as a hub for the management of the school LMS has the core functionality of the Registration, Delivery, Tracking, Communication and Testing. This will cover the building of content and manage the content. The content will be in the form of a learning object. These are the lessons to support collaborative content (shareable) and bring together different content formats for different lessons.

Benefits of LMS for e-learning

- Flexibility, accessibility, convenience: Users are able to proceed through a program at their own pace and at their own pace. Users can access an e-learning course anytime, anywhere, and learn only as much as they need.
- LMS for E-learning can be accessed by Web browsing software on any platform, delivered to any machine over the internet or intranet without having to author a program for each platform.
- Browser software and internet are widely available: Most computers have access to a browser, are connected to the organization's intranet or the internet.
- Ease of updating information: if changes need to be made to a program or courseware after the first implementation, these changes are made on the servers storing the program or courseware. Everyone worldwide can instantly access the update of information.
- Learning efficiency is increasing significantly. Not only from a qualitative standpoint (i.e. pedagogical by the use of a new method, personalization, learner autonomy, memorization and follow-up, operational by learning by opportunity and the speed of the learning updates, and organizational by creation of knowledge sharing community) but also from a quantitative standpoint (i.e. learning elapse decreases, learning cost may be reduced and learning effectiveness is increasing).
- On facilities, instructor fees, printing, distribution and storage costs which may be reduced.
- the opportunity costs of not having adequately trained personnel, the increased productive time on the job, a shorter time to deployment of a new product or service, the increasing effectiveness of system

- Knowledge transfer is more accessible, training delivery is more consistent, knowledge may be certified on a large scale, expert can now perform the job, and they do not need to teach classes, morale increases through equal training capabilities.
- Just-in time activities are available, employees know 'where they stand', which motivates them; learning priorities are clearly prioritized; progress is being watched an evaluated positively.

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