

E-Learning Platform - The Dynamics of Mills Used in the Construction Materials Industry

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ABSTRACT

Virtual environment represents the tool which assures the access to the course material, and makes possible the interaction teacher – participant as well as the content management and the course activities.

For implementing an online courses program or some online collaboration spaces, one of the important decisions are referred to the virtual environment: VLE - Virtual Learning Environment or LMS - Learning Management System, where these will take place.

E-learning platform contains the following modules: information, schedule students, forums, chat, online course.

Keywords: e-learning, HTML - HyperText Markup Language, online course, Web technologies.

1. INTRODUCTION

When an educational institution wishes to offer a training program or online collaborative spaces online, one of the important decisions concerns the virtual environment - VLE - or Virtual Learning Environment LMS - Learning Management system, they will unfold.

Select the environment depends on the number of courses, instructors and participants, the duration of the program.

The facilities they provide most of the media:

- access to secure and controlled environment
- each user has an account; environment is the use of a Web browser, users have specific rights relating to the use and administration environment, is usually visible activity, the participant's portfolio, some environments can automatically assess skills and training needs;
- access/content management course - in theoretical modules different formats (HTML, audio, video), templates for the development of materials in November, planning activities, information through ads, can search, access to resources, libraries online;
- communication between the facilitator and participants in conferences asynchronous (discussion forums), chat, e-mail, some media have facility for private messages reference (like an e-mail sent in the course);
- assessment participants - a reference themes, creating and administering questionnaires;
- can work groups, with private areas of communication;
- administration - creation accounts, administration components course.

2. MEDIA VIRTUAL LEARNING

2.1. Classifications of the media (LMS, LCM, CMS)

Criteria taken into account when comparing VLE: technical specifications; creating incentives for utilities-didactic material and facilities for business members; intuition and simplicity surfing; potential for

communication, collaboration; compliance with the standards e-learning; hosting.

A virtual environment is the only tool that provides access to course material is carried out interaction between participants and facilitator, as well as content management and business class. Neither the most sophisticated environment, not replacing his teacher and art to engage and motivate participants in a process learning and collaboration.

In literature there are some terms that refer to media learning:

- LMS - Learning Management System - the complex system, with features described above, for all the four categories of users; other names are encountered Knowledge Management System, Course Management System, Academic Management Systems, Student Management Systems;
- LCMS - Learning Content Management System - which allows editing system, but also controlled access to e-learning materials;
- CMS - Content Management System - the system for editing materials. [1]

2.2 Learning Management Systems – LMS

Learning Management Systems - LMS - performed the functions of management and participants of a course online. Managing courses are at high level, the courses itself can be imported from other applications or created in the LMS design. If they are not made in LMS, selecting a course is launched application of it has been imported, as this will deal with management-level course and send to the LMS a report on the progress of students in the class. LMS is a purely administrative function only, and may achieve different reports about participants and courses.

For storing information about participants and courses, LMS uses a database, whose content can be modified by the administrator.

Through a Web interface, a LMS allows the administrator to perform actions such as registration of students, adding courses, recording results, and notes that the system is generating reports.

The structure of this system varies Structure vary, but the database of the LMS registers usually the same: students and courses. It also defines the plan and study how the students are assigned to courses.

Since a purely LMS does not offer incentives for the creation of course, it should allow the importation of courses created with various other instruments.

From the viewpoint of participants, LMS offers the possibility of using a single account for access to more courses, once authenticated user can access all the courses to which it is registered.

2.3 Learning Content Management System – LCMS

Learning Content Management System - LCMS are responsible for creating, storing and modify the objects of study - Learning Objects - in a database, which can be taken and also to achieve courses.

Even if LCMS sites differ widely between them, are based on a common set of characteristics:

- allow editing and controlled access to e-learning materials;
- allow the creation of a course of the following elements: HTML pages, data in XML format, multimedia files in various formats;
- provides facilities for checking the degree of achieving the objective of the lesson by learners with the help of questionnaires;
- contain definitions of lessons and courses, which specifies how the combination of objects in the previous point;
- allow the use of templates and style sheets to achieve rapid and customizing lessons created;
- provides a mechanism for navigation in the course and lessons, independent of them, which may include a scheme and course.

There is ability to create courses that any lesson can be accessed independently, but also courses in which there is a graph of dependence between lessons, they can be done only in a sequence.

At the level of a course is very important collaboration between participants, there must a series of instruments to make the achievement of synchronous and asynchronous communication between them.

3. EDITING SYSTEMS FOR CREATING PAGES WEB

Web page editors can be a viable alternative for the creation of pages because:

- the process of e-learning is done in General Web technologies, as though these editors need to achieve some parts of the system;
- is a much there larger market for these editors, which led to the creation of instruments much more reliable, easier to use and cheaper than the specialized e-learning;
- knowledge of these instruments no longer constitutes a problem;
- can be combined with editors and multimedia tools for the achievement tests, obtaining the same effect as in the case of specialized programs.

The converters are instruments that allow the achievement of rapid course of existing resources, such as different graphic presentations or other documents (even drawn up on computer courses) in a format recognized by the e-Learning used. The role of these instruments is to achieve automatic conversion of documents from one format to another, generally being used for the conversion of study materials in a format accessible on the Web without the need Knowledge of programming for writing. The most popular programs as Word, PowerPoint, have included facilities for converting files in HTML format, no longer need additional programs, which may, however, contains features performances may.

To ensure a uniform appearance of the courses may be necessary subsequent processing of these materials, but the availability of information on the Web is already assured.

3.1 Editors HTML

Pages are created in the same format or language called HTML - HyperText Markup Language, which is a subset of SGML - Standard Generalized Markup Language. [2] HTML is a markup language for hypertext which is understood by all WWW clients. It is a continuing evolution in language and different WWW browsers can recognize different versions of rules HTML.

All components HTML Document Type Definition (DTD) supervised by W3C.

World Wide Web Consortium - W3C - <http://www.w3c.org> - is a non-profit organization that coordinates Web developments, including the Internet Engineering Task Force, a group of specialists who make recommendations for the introduction of new markup codes.

Tim Berners-Lee, creator of the first Web pages, is chairman of the W3C, formed in 1994, its proposal. [3]

3.2 Browsers and editors HTML

HTML is a constantly evolving language and different WWW browsers can recognize different versions. The development of a Web site, testing should be made in as many browsers, so information offered to be viewed by all site visitors, regardless of the browser available, the optimum time download.

Most browsers used are:

- Internet Explorer - <http://www.microsoft.com/windows/ie> - the may used;
- Netscape Navigator - <http://channels.netscape.com/ns/browsers/>;
- Mozilla - <http://www.mozilla.org>;
- Opera - <http://www.opera.com>;
- HotJava - the browser that can run the applet - Java2.

4. PLATFORM E-LEARNING

Access to a particular course can be restricted through the use of accounts and passwords (Fig. 1). [4], [5]



Figure 1

The program comprises the following modules: information, calendar, students, forum, chat, tutorials, platform management. [9]

Information. At one level department has a page that contains the latest news. For each ad, date, the title of the ad and the content of this can be display.

Calendar. To highlight the main events may be introduced a calendar, which can be traced day course, the day of examination or other events.

Students. For a better knowledge of colleagues and of course for a better communication on this page are introduced e-mail students.

Forum. The Forum allows the user communication with the teacher.

Chat. This type of communication allows sending short messages among people who work in the network; messages are stored on a server until they are received. This mode of communication is useful for the organization of conferences between two or more users, in terms of bandwidth limited.

Tutorials. HTML editor contains the most common elements to create a course and can enter HTML tags if you wish to use the more complex construction, files containing these lessons may be in the form of text, HTML, Power Point. Course page contains a set of lessons divided into chapters (Fig. 2, 3). [6], [7]

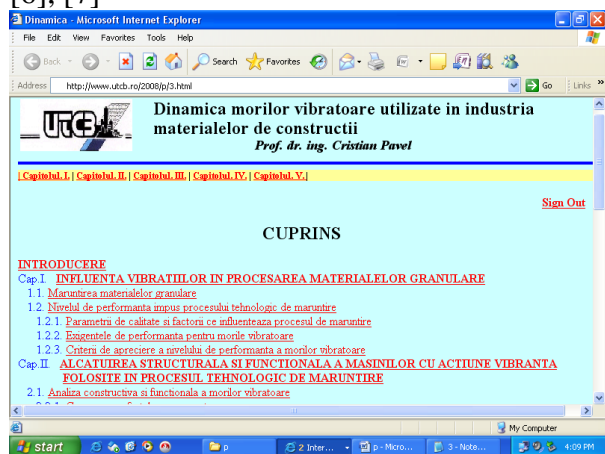


Figure 2

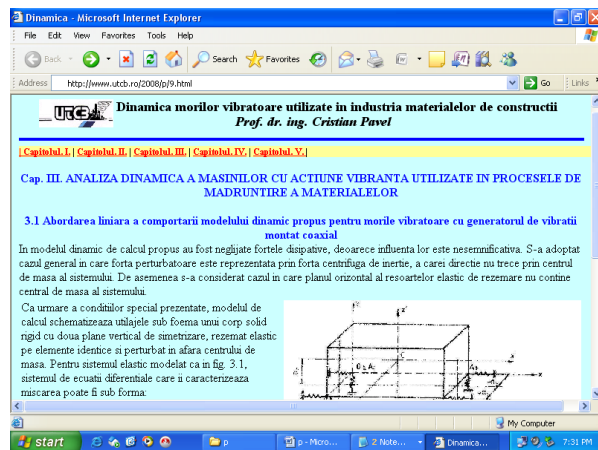


Figure 3

5. CONCLUSION

Editor web pages can be a viable alternative for the creation pages, the statement supported by the following arguments:

- e-learning process is generally done with Web technologies are needed anyway these editors for completion of parts of the system
- is a much there larger market for these editors, which led to the creation of instruments much more reliable, easier to use and cheaper than the specialized e-learning
- working knowledge of how these tools are no longer constitutes a problem
- can be combined with editors and multimedia tools for the achievement tests, obtaining the same effect as in the case of programs specialized.

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