

HOW DO LEARNING MANAGEMENT SYSTEMS ENHANCE HIGHER EDUCATION?

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Abstract_ *No factor has changed the face of education as dramatically as Learning Management Systems. Learning Management Systems have revolutionised the definitions of terms such as ‘school’, ‘instructor’, ‘learner’, ‘course’ etc. They have increased the quantity and the quality of schools’ outcomes. Learning management systems are considered to be among the top technologies that have suddenly spread very quickly worldwide. This paper discusses how learning management systems enhance higher education.*

Highlights: *The LMS plays the major role in the revolution of education in the current era. It helps instructors to teach effectively. It assists students to make the learning flexible process. It enables schools to overcome a lot of educational problems.*

Keywords: *Computer-mediated communication, Interactive learning environments, Adult learning.*

I.INTRODUCTION

Interestingly, learning management systems have different names, and I attribute this to the fact that they are so widespread. They are called Learning Management System (LMSs), Course Management Systems (CMS), Learning Content Management Systems (LCM), Courseware and Virtual Learning Environment (VLM) [1]. However, all of these terms share the same definition, which can be driven from two perspectives. First, from the education point of view, learning management systems (hereafter LMS) consist of a number of web-based tools that allow school managements instructors and students to communicate, exchange, and manage online contents. Simply, as FarshadMahnegar states, the LMS is “a software used for delivering, tracking and managing training/education” [2]. On the other hand, from a technical point of view The LMS is server-based software available on a website with an interface connected to a database which contain users and materials [3].

The first LMS was established in 1995 by a company called CALC [4]. It was developed from 1985 until the Internet became available and played a major role in disseminating the LMS overseas. Nowadays, there are numerous companies that design the LMS, such as Angel Learning Inc. and Blackboard Inc., and this market is considered one of the most profitable software businesses.

There is widespread agreement among experts that these days, online services are one of the most significant factors

in the success of any business [5]. Even though some people do not like to think about education in these terms, in the information age it has become a rentable business. Therefore, to maintain education as a successful business, there is a huge demand for the provision of online services.

The millennial generation vary from previous generations in many ways, including their ways of learning. They prefer to learn through flexible methods [2], to receive immediate responses, and they want 24/7 available service. Moreover, they learn more effectively when they are using technology.

Before the advent of the LMS, instructors struggled with many tasks. Teachers were required to undertake many additional responsibilities besides teaching, such as tracking students’ projects, grading, responding to queries etc. They were in need of tools that could help them to complete these marginal tasks.

Even universities suffered before the invention of the LMS. For example, the days of enrolment in classes were very demanding for staff. Also, universities had to deal with a range of issues face-to-face with prospective students, faculty members and current students, such as admissions and registration issues. As a result, they were required to employ a large number of people and provide extensive facilities such as parking.

Institutes had to respond to all these needs, and the best solution - which was actually not one solution but multiple solutions in one - was the LMS. Without doubt, the LMS provides a great number of tools that help students to learn more efficiently, instructor to teach more effectively, and school to manage more powerfully, as I will explain below.

2. Learners and the LMS

The LMS brings countless benefits for learners. The majority of today’s learners have smart devices, either computers or cell phones, and they prefer to do their work online whenever they can. The use of the LMS attracts students to education, since it is delivered in a way that they like [6]. For example, the LMS allows students to enrol and drop classes online instead of coming to the registration office [7].

Usually, education costs students or their sponsors a lot of money. While some believe that one of the reasons for increasing education costs is the price of integrating the LMS, if we look to the LMS from a different side, it can play

a key role in saving money. For example, learners are no longer required to have a printer, print papers and refill the ink, since they can submit their assignments electronically using the LMS tools such as email or dropbox. Moreover, the LMS allows students to contact their instructors or do what they need online, so they could save money on travel expenses.

As mentioned above, nowadays students, who have grown up with chatting and texting programs, love immediate responses. The LMS provides tools that enable student to get immediate answers from instructors, other students or the system itself. One of these tools is called a discussion forum. Another benefit of the LMS is that they keep students updated about their grades [7]. This feature can be utilized by instructors to motivate students to do their best. Also, it allows students to find out the average grade, so they can know whether their performance is above or below average. Regardless of the time and the physical location, by integrating the LMS, education is available wherever and whenever [7]. This characteristic motivates people to seek education. Students are now able to submit their homework and watch lectures from home at midnight. For instance, most LMS provide videoconference services. One use of the videoconference is to help students who are working together on a project to meet with each other even if they are in different countries.

Even though some people believe that putting the whole university on a website may influence the concept of higher education and hamper students' discovery of and benefit from the resources and the services that university usually offers [6], the LMS in fact gives students a chance to change the university to the way they like [7]. As a result, the LMS increases students' engagement in the learning process, and they become more active, feeling that the LMS becomes a personal website. Thus, learning outcomes can be enhanced.

"Mom, have you seen my...?" The LMS help to avoid these annoying questions, as it can work as storage for students' materials. Najmul Islam proclaims that "Finding all materials in one place is great" [8]. Syllabi, assignments, exams, videos, audio files etc are not lost any more, and are accessible regardless of students' location. Moreover, learners can benefit from physical space in their homes that was formerly used for school materials.

Although it is true that most LMS are closed environments[4], the LMS is an educational environment where students and instructors can interact and enrich their learning with facts, not fakes. Class time is always limited! Also, some students are too shy to talk or they may be afraid of making mistakes, so they do not like face-to-face

interaction. Nevertheless, the LMS takes care of these issues and offers opportunities for students to interact with others and discuss topics more deeply. For example, the LMS usually provides tools for chatting either by text or voice. This kind of comfortable and useful interaction leads students to expand their knowledge, share their thoughts and exchange resources[8].

All of the abovementioned gains that students benefit from the LMS. To find out more about what the LMS bring to education, we may look to the impacts of the LMS on others, such as faculty members. As Gary Woodill claims, "Technology cannot replace the skills of a good teacher. But it can add to, and extend, the abilities of instructors to work with more learners, at a greater distance, and with better results" [9]. Even though the LMS present a lot of powerful tools for faculty members, they might be confused about which tool should be used and how to use it [8]. As a result, they need training in how to utilize the LMS tools. These tools can be categorized into content creation tools, communication tools, assessment tools and administration tools[3].

3. Faculty Members and the LMS

The LMS offer tools that allow teachers to create content in web format [7]. Also, it assists them to integrate the content of countless of resources on the internet and link students to different sites. They are able to record a video or an audio file and upload it to the LMS. Moreover, the LMS diminishes the effort needed for developing these contents, since it is in digital form.

Another service that faculty members can utilize very well is communication tools. Most LMS offer two types of communication: synchronous and asynchronous. When instructors need to reach their students immediately for whatever reason, most LMS have the ability to send text or voice messages to students' cell phones, or they can use chatting functions. On the other hand, the LMS have different tools for asynchronous, communication such as email or course interface for announcements.

The LMS assist faculty members to assess students' performance in ways that are easy and effortless. For instance, instructors are able to create multiple-choice or true/false exams using the LMS [7]. This type of LMS tool offers countless gains for both teachers and learners. The first is that instructors are no longer required to correct these exams. Another is that instructors can make better use of their class time and let students do the exams at home. Furthermore, students can do their exams in their own time, and they may receive immediate feedback, since their work is corrected automatically; however, one of the problems that

should be considered is the type of the assessment that the LMS provide [6].

This type of assessment, multiple choice or true/false, should not grow to be the dominant type.

While there is resistance from some instructors toward the use of the LMS, since they are required to spend time and effort in learning how to use these systems [10], they should realize that the LMS provide tools that decrease the time and effort needed for teaching. Managing a whole course effectively demands a huge effort, sometimes including physical effort from the instructor, such as tracking student projects, taking assignments to the office or home and then back to the class etc. The LMS can help to take care of these marginal works. The LMS provides many tools to instructors, such as drop box for receiving assignments, report tools for tracking students' projects and email for distributing materials.

To understand the value of the LMS more deeply, we should explore it from different sides. What does the LMS represent for universities? In fact, the LMS help universities in many ways, as I will discuss below.

4. Universities and the LMS

The LMS helps schools to attract students regardless of their location [11]. The majority of universities nowadays offer online programs and manage them through the LMS. Thus, universities increase the number of enrolments in online classes without being limited to local students. For example, the University of Phoenix has more than 152,000 students around the world[3].

The LMS, as Pine declares, "allow educational institutions to manage a large number of fully online or blended (part online and part face-to-face) courses using a common interface and set of resources" [3]. Moreover, the LMS allow universities to recruit instructors to teach these classes even if they are far away from the campus.

Interestingly, if you visited any registration office at any university that uses the LMS at the beginning of the semester, you might be surprised, since it is not crowded. The LMS help schools to overcome this matter by allowing student to enrol and drop classes online.

The LMS decrease the need for physical space [6]. As mentioned above, when students have the choice to do what they need online, they will not come to the campus. Thus, universities can profit from this in many ways, such as reducing parking space.

Undoubtedly, the LMS aid universities to manage and protect files, documents, students' records etc [4]. The LMS make records more flexible and accessible. For instance, universities can store their archives online, so when someone

like a graduate student wants copy of his or her transcription, he or she does not need to go to the university, and at the same time universities can abandon their real archives.

While it is true that to buy a LMS and train faculty members and employers is probably expensive, it seems that such systems may save a lot of money for universities. For instance, by using the LMS, universities are able to reduce the number of employees. Furthermore, universities can create virtual labs instead of real labs, which are costly [11].

The LMS offers powerful tools allow university management to contact faculty members, students or employers and let them contribute to decision-making. Also, the LMS help to distribute announcements quickly.

From another side, the LMS change the definition of content. Content can now be multi-media [4]. It can be integrated with images, audio or videos. Also, the LMS allow students to exchange their thoughts, and these thoughts or experiences can be a part of the content. Content is no longer static. However, there some concerns that online contents may shift students' concentration from the content itself to the technology [12].

5. Conclusion

In conclusion, if Facebook and Twitter played the major role in the Arab revolutions, then the LMS plays the major role in the revolution of education in the current era, from 1995 until now. The LMS assist students to achieve their goals by shifting education from the traditional approach, with textbooks and the whiteboard, to the Internet, audio, emails and chatting. Also, it enables them to interact with others, express their ideas and attend classes without leaving home. Faculty members, who were once so busy handling other matters besides teaching, are also benefiting from the LMS. They become able to enrich the learning process by integrating images, videos or audio with their course content. Also, they can stay in touch with students at any time by using communication tools in the LMS. Moreover, their grading workload is reduced by using assessment tools from the LMS and there is no need to carry students' materials from the class to the office and back. Undoubtedly, however, the greatest benefits from the LMS in my eyes are for universities. They became able to admit thousands of students even if they do not have a campus. Also, they can attract scientists and researchers even if they live in different countries. Moreover, the LMS assist them to increase their income and enhance the outcomes. Also, with the help of the LMS, they can address many of the problems that they used to face, such as enrolment. As Piña points out, "no other innovation in higher education has resulted in such rapid and widespread adoption as the learning management System"

[3]. On the other hands, educators should be aware of the disadvantages that the LMS may bring to higher education and try to avoid them[5].

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