CHAPTER 13

LEARNING MANAGEMENT SYSTEM: AN EFFECTIVE METHOD OF TEACHING IN TERTIARY INSTITUTIONS IN THE 21ST CENTURY

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ABSTRACT

Learning Management System (LMS) has become the best option in our citadel of learning today due to some unforeseen circumstances that heralded the closure of schools worldwide some years back. Throughout this time, all sectors became paralyzed and education is inclusive and students were made to move about on the street without doing anything reasonable. Technology has eased the burden on us today and There ought to be none a justification for any student not learning in any situation. Apart from a circumstance like COVID-19, which led to the closure of schools some years back, the student population today is worrisome owing to the admission policy of carrying capacity that does not allow some institutions to admit more than what their resources could serve. Many qualified students today could not be admitted into tertiary institutions because of the problem of where to put them during classroom interaction. If Learning Management System is given top priority as the best option, some of these problems will not suffice again in our institutions. This platform provides an opportunity for both educators and learners to interact anywhere at any time and it reduces physical classroom interaction. This article examined the meaning of the Learning Management System, its advantages and many of the challenges confronted by the users and based on this, recommendations were made.

Keywords: Learning Management System; Institutions; Effective Methods

INTRODUCTION

In Nigeria, the primary goal of instruction at any educational level is to fundamentally alter a student's behavior. There are several instructional strategies, that as the lecture approach, the discussion method, and the demonstration method, that have been employed to achieve these objectives. These techniques were developed from learning theories like behaviorism and constructivism to speed up the transfer of knowledge.

The capacity of educators to use technology into different teaching methods has become essential given the speed at which technology has developed in the twenty-first century (Tanak, 2018). This change has impacted how people instruct and receive instruction in academic settings. In this sense, researchers' interest in researching how instructors integrate technology skills in the classroom has grown (Graham, Burgoyne, Smith, Clair & Harris 2009; Srisawasdi, 2014).

A teaching strategy is a set of guidelines and techniques used by instructors to facilitate student learning. These tactics are influenced by the learner's personality and the subject matter that will be taught, in part. It's crucial to take into account the learner, the subject matter, and the intended learning style when choosing a teaching strategy for it to be effective.

A learning management system (LMS) is a piece of software used to administer, record, monitor, and report on training events (in-person and online), e-learning courses, and training materials. Systems for managing training and educational data, in addition to software for online class distribution with features for online collaboration, are all examples of learning management systems (LMS). Some of the features of learning management systems include learner self-service (like self-registration for instructor-led training), online learning (like read-and-understand training and computer-based training), online assessment, management of continuous professional education (CPE), collaborative learning (like application sharing, discussion threads), and training resource management (such as instructors, facilities, and equipment).

Learner self-service (such as self-registration for instructor-led training), online learning (such as read-and-understand training and computer-based training), online assessment, management of continuous professional education (CPE), collaborative learning (such as application sharing, discussion threads), and training resource management are just a few of the components of learning management systems (such as instructors, facilities, and equipment). Learning management systems (LMSs) are used by educational institutions to improve and assist classroom teaching and to provide courses to a broader globally distributed student population. Some LMSs are Web-based to enable access to learning content and administration (Aberdour, 2007: Ellis, 2009).

Learning Management Systems (LMSs) are also referring as Virtual Learning Environments (VLEs) or Course Management Systems (CMSs) and are one of the e-learning methods that benefit both students and teachers (Falvo & Johnson, 2007; Altun, Gulbahar, & Madran, 2008; Chang, 2008;). Web-based technology is known as a learning management system that assists in the planning, distribution, and evaluation of a specific learning process (Alias & Zainuddin, 2005). A Learning Management System (LMS) makes several of the processes associated with learning work. It is a management software package that makes the delivery of learning content, resources and activities easier than face-to-face classroom interaction (Hobbs, 2005).

Learning Management System embraces any use of web technology to plan, organize, implement and control aspects of the learning process. Greenberg (2002) gave a comprehensive explanation of LMS. He described it as a high-level, strategic solution for organizing, carrying out, and overseeing all organizational learning activities, such as online, virtual classroom, and instructor-led courses.

LMS includes software for delivering online or blended/hybrid college courses via the internet with tools for online collaboration, as well as systems for managing training and educational records. Schools or Universities use LMS to deliver online courses and complement on-campus courses. Private or Corporate organizations use LMSs to deliver online training, as well as automate record-keeping and keep employee records.

This article's emphasis is on the use of LMS in educational institutions. Because of online learning, a decline in classroom engagement due to unanticipated situations, and increased access to education, universities have seen a future in the usage of LMS. The number of institutions that can house all the students, especially universities, is causing overcrowding in the classrooms in many institutions today. The ideal solution to reduce face-to-face teaching and physical classroom contact is a learning management system (LMS). Due to overcrowding, our GNS classrooms are becoming unmanageable, and several universities are investigating the usage of LMS to decrease the amount of classroom contact. Creating class rosters, managing registration and waiting lists, uploading and managing curriculum-related documents, delivering course material via a web-based interface, enabling an entirely remote educational experience for the instructor and student, creating and publishing course calendars, and facilitating student interaction via features like instant messaging are just a few of the opportunities that the LMS provides. According to Mudasiru (2021), the following are the features of LMS;

Structure: A good LMS should have a structure with the integration of all learning-related tasks into a single system and their centralization which would make navigation easy and effective.

Security: The learning management system should be protected from unauthorized persons who want to have access to courses, student records, and administrative functions.

Registration: A good LMS should help in finding and selecting or assigning courses and curricula by learners and their supervisors, which would also include instructor-led training classes.

Delivery: LMS should provide seamless delivery of content, and on-demand delivery of learning content and experiences to learners.

Interaction: it should provide an opportunity for smooth interaction not only with the course material and the dialogue among learners, instructors, and administrators but also between communicative content and the LMS.

Importance of LMS

LMS provides a variety of teaching and learning techniques to support the work of both educators and learners. It encourages the components of deep learning, including individualized, collaborative, and informal learning. The LMS can serve as the hub for learning management, with its content materials backed by a variety of media and sources.

Additionally, the LMS is designed with a function for engaging in collaborative learning, the teacher can evaluate and mark the collaborative actions of the pupils' thanks to recent LMS advancement (Oliveira, et al., 2016). Along with grading the pupils' work, the teacher can offer rapid, instantaneous feedback. There are several tools available as well. to enable collaboration, that as the efficiency of the link to outside resources, including images, videos, or additional elements not included in the primary course contents. Additionally, how the students contribute to collaborative projects, whether by text, voice recordings, or even video recordings

LMS provides significant advantages to academic institutions generally and instructors specifically. E-learning tends to engage students and teachers, which will improve student participation and interactions in the classroom, as claimed by Mehdizadeh, Biemans, and

Mulder (2008). The two benefits of e-learning and the most frequently used LMS highlighted are increased efficiency and cost reductions. (Naidu, 2006; Acze,l Peake & Hardy, 2008). Additionally, LMS could speed up the learning process and enhance user (educators, staff, and students) communication effectiveness (Cavus & Momani, 2009). Additionally, the use of ICT in education helps the trainer and the firm that has adopted it by speeding up learning and improving employee retention.

Effectiveness of Learning Management System in Teaching

Technology is a part of learning exploration in the twenty-first-century learning paradigm because it allows students to engage with the actual world while studying resources that are utilized to carry out deep learning. (Saavedra & Opfer, 2012). The technology of today can support students' casual, personalized, and collaborative learning. Its existence of It will assist students in growing their higher-order thinking skills. A balance between formative and summative assessments that measure students' mastery of these abilities, as well as digital literacy and technological competency, is also necessary for the analysis of 21st-century teaching methods. Therefore, there is a connection between the teaching and learning of these skills and the usage of technology.

More recent studies have revealed that teachers need to have a firm grasp of how to mix technology with pedagogy and subject-matter expertise to be able to properly integrate technology into classroom instruction (Graham et al., 2009). This necessitates a deeper understanding of the teacher knowledge framework, specifically how instructors successfully connect their pedagogical knowledge to their subject-matter expertise (Tanak, 2018).

E-learning technologies were initially implemented in distance learning programs to aid adult learners' learning processes. Virtual learning environments became an instructional tool as soon as traditional classroom teachers were aware of the possibilities of e-learning tools (Wade, 1999; Liaw & Huang, 2000).

Teachers are increasingly using e-learning resources as a secondary or major teaching strategy. Although many of these new technological innovations were not created expressly for use in education, instructors can nonetheless effectively incorporate them so that students can benefit. (Boyce, 1999). Many educators concur that the adoption of e-learning resources in the classroom has sparked a social shift in the pedagogy of instruction (Donnely & ORouke, 2007: Wells, Lange & Fieger, 2008).

Learning Management System (LMS) has received widespread use in the educational disciplines, especially in school settings. Employing an LMS, however, entails more than simply putting meeting materials onto a virtual platform. According to Saliba, et al. (2013), When using LMS in the classroom, teachers need to consider a few things. First, when using an online platform or LMS, it should be obvious what its purpose is. Second, it is essential to prepare and develop lesson materials since teachers must decide what are best to include in in-person meetings and LMS. The kind of student collaboration and communication should then be considered when employing an LMS. Following that, giving comments need to be included in both in-person and LMS modalities.

A web-based platform known as a learning management system (LMS) enables users to manage their face-to-face and online teaching and learning activities. LMS streamlines the delivery, monitoring, and administration of the instructional process (Lonn, 2009). Oliveira,

et al. (2016) claim that LMS automatically creates administrations of the course, including recordings of users, courses, and learning processes, student participation statistics, and learning course reports. In addition to supporting synchronous and asynchronous learning, grade book administration, mobile learning, tracking of skills, social learning, student portal, testing/assessment, and even video conferencing, it also supports social learning. Furthermore, most of them are free.

The effectiveness of the students' outcome, whether or not the outcome has attained the learning goals, should be used to judge the success of teaching and learning both in-person and online (Saliba, et al., 2013). The findings of the students' summative and formative evaluations, which were done throughout both face-to-face and online learning, show this conclusion. Additionally, students' participation and attendance might serve as markers of their performance (Trowler, 2010). According to Oliviera et al. (2016), LMS provides the ability to track students' performance on learning tasks, quizzes, discussions, and assignments that use the teacher to determine their course results, utilizing text, voice recordings, or even video recordings, which is effective.

Problems affecting the use of Learning Management System

A few of the problems affecting the use of LMS are as follow

a) It is capital intensive: Learning Management System is expensive to create depending on the need of the institution. This singular factor is a bane of developing LMS in some institutions as they could afford it.
b) It consumes time: The time required to install hardware, software, course and database is very huge and substantial. Some institutions prefer other approaches which consume less time and are easier to use.
c) Lack of technical know-how: Learning Management System usage requires understanding the rudiment of the technology. Computer literacy is very fundamental in using or operating LMS. Today, many institutions employed lecturers who have little or no knowledge of computers and this impedes the usage of LMS in many institutions.
d) Network issues: utilization of LMS requires functional network service or providers. In a situation whereby the network is not performing well, this may hinder the functionality of the LMS. There are institutions without good network systems and this will seriously affect the operation of LMS.
e) The attitude of some staff towards Computers: The way that some staff in tertiary institutions toward computers and technology generally is not encouraging and this affects the usage of LMS widely in some of the institutions.
f) It is a challenge for some teachers/lecturers to create and organize their course materials that will facilitate interaction which will later aid proper understanding. Developing and organizing course materials requires expertise.
g) The attitude of students: Students up till today prefer physical classroom interaction rather than virtual learning.
h) Epileptic power supply in some Institutions: There is a problem with the regular electricity supply in some institutions. utilization of LMS requires a regular power supply.

Conclusion

Considering the above it is concluded that the learning management system is an effective teaching method in the 21st century and also it encourages individualized learning which encourages the use of technology. The use of learning management systems enhancing better understanding cannot be overstated.

Recommendations

Having examined some of the problems affecting the learning management system, depending on the findings, the following recommendations were given.

1) There is a need for institutions to seek financial assistance from various organizations that are willing to help in providing functional LMS. Also, institutions should prioritize their financial engagements to ensure that top priority is given to the provision of functional LMS.
2) Proper training and workshops are required to educate teachers/lecturers on how to use the learning management system. The training should be made compulsory and certificated.
3) Institutions of learning should have good network service which is uninterrupted. For any institution to have functional LMS, there is a need for stable network service.
4) Proper education is required for the students on the importance of LMS and its usefulness in the teaching and learning process. Students should be made to know that LMS gives room for them to learn anywhere and anytime.
5) An alternative power supply should be provided in a situation whereby a regular power supply is not guaranteed.
6) Teachers/lecturers should be educated on ways to grow and organize their course materials to make them more fascinating for students.

More importantly, it is recommended that educators in tertiary institutions should be encouraged to use LMS as it is the ONLY means that gives assurance for qualitative education in the 21st century.

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