



UNIT 3. LMS TYPES

AIM

is to present to teachers open-source learning management systems mostly sufficient for online learning

IMONED

consortium

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Unit 3. LMS types

The aim is to gain knowledge on how to choose the most appropriate LMS to implement online learning processes and to use it in practice.

Learning Management System (LMS) is a broad term used commonly to describe various systems providing online educational services for students, teachers, and managers. Learning Management System (LMS) is a broad term that is used for a wide range of systems that organize and provide access to online learning services for students, teachers, and administrators. Generally, these services contain some fundamental facilities such as limited access control to authorised people, providing different types of learning content and different types of communication tools. The online learning platform is another alternative expression sometimes used to refer to LMS [\[1\]](#).

LMSs provide many benefits for the educational process.

Bellow some features of LMS:

The first feature is the concept of discarding the physical location. LMS can be used as an effective tool for students belonging to the same university and studying on different campuses [\[2\]](#). Some universities have multiple campuses that might be national and international campuses which basically may have a different time zone. LMS is used to gather all these different students in one virtual place enhancing all their interactions, discussions and feedback. In fact, using LMSs or eLearning is beneficial for all students generally, and particularly for those students who have some difficulties such as living in places far from the original physical campus (rural areas or different country) or having health problems as it is a continues educational proses regardless of the location and time [\[3\]](#).

Accessibility is another feature of applying LMSs in the academic sector. In the past few years, personal computers (PCs) and laptops were the main devices that many students use. Davis et al. [\[4\]](#) state that there is an increase using in digital devices among students and teachers inside their schools as a part of the educational process, such as Bring Your Own Device (BYOD). That includes the new generation of smartphones, tablets and phablets. As a result, most LMSs have increased their accessibility and allow their users “students and instructors” to login via various ways such as using any internet browsers from computers or the official app of that LMS as most LMSs have their own app in different operating systems (that are Android, IOS and Windows Phone (WP)).

The next feature is that **LMSs are attractive Environments**. In some cases, eLearning generally and LMSs particularly be an attractive environment, especially for young students. Using gamification or video games for educational purposes might attract school-age children as well as adolescents, that is in their performance and the final outcomes [\[5\]](#). In fact, many LMSs support this optional feature and the implementation of it is depending on a decision from the management of an academic institution. Finally, most LMSs can be integrated with any missing content. LMSs developers try to provide all the available features in their software for two main reasons, that is, getting more satisfied customers and for seeking new ones. This can be achieved by frequently updating and improving. This happens in both open source and proprietary LMSs. Sometimes, a missed feature could be found due to different users’ needs and requirements.


LMSs can be integrated with some common features in order to match the users’ requirements. In some cases, LMSs can integrate with professional features such as virtual laboratories or remote laboratories [\[6\]](#).

Khairudin et al. [\[7\]](#) present 5 main criteria for the Human Capital perspectives. They also mentioned some indicators under each criterion. One example under each criterion is provided:

- 1) strengthen lecturers' knowledge of contemporary technology. An example of its indicator is to provide essential training and support based on available software to academic staff in continuing stages.
- 2) Increasing students' contributions in collaborative interaction in learning. For example, the effort to achieve a higher percentage of students who participate in online discussions.
- 3) strengthen students' academic integrity. For instance, provide an online submission component for assignments subsequently reducing the number of late submission assignments.
- 4) Providing more chances for students' contribution and student obligation level in distance learning courses. An illustration of this is the features of accessibility which can enhance the contribution and online activity, particularly for distance learning courses.
- 5) strengthen technical operators' proficiency. For example, require some IT members to join some technical short-courses on their new LMS.


Currently, most of the universities are using several commercially and open sources available LMSs packages such as Moodle, Google for education, Edmodo, Teams 365.

Description of Moodle

Title of the technology	Moodle
Identifying logo	
Open source (yes/no)	yes
Official website	https://moodle.org/
Key Features:	<ol style="list-style-type: none"> 1. Open 2. Accessible for all 3. Security and privacy 4. Flexible learning 5. Mobile learning 6. Easy integration
Strengths of the technology	<ol style="list-style-type: none"> 1. Open-source 2. Free to use 3. Available smartphone apps 4. Included text editor
Weakness of the technology	<ol style="list-style-type: none"> 1. Limited support options 2. User reports bugs in mobile apps 3. Certified Service Provider may be needed at additional cost


Why using in education?	Moodle LMS is an open source secure, feature-rich software platform that runs on any computer server and all common devices to create a web-based online learning space containing “courses” full of resources and activities.
Main interface issues	Moodle meets accessibility in four key areas. Whether you are an educator, learner, developer or system administrator,
Official guidelines for users (links)	https://docs.moodle.org/311/en/Table_of_Contents
Resources links	https://docs.moodle.org/311/en/images_en/2/2a/Moodle_features_students.pdf

Google for education

Title of the technology	Google for education
Identifying logo	
Open source (yes/no)	Yes
Official website	https://edu.google.com/
Key Features:	<ol style="list-style-type: none"> 1. Enable seamless collaboration 2. Boost productivity 3. Communicate flexibly 4. Organize your tasks 5. Provide trusted security
Strengths of the technology	<ol style="list-style-type: none"> 1. It's free! 2. Easy to set up in a few steps 3. Recognized by many schools and organizations 4. Already integrated with Google Drive and other tools 5. Comes with Google's security 6. Free training and learning opportunities 7. Integrates with many 3rd party apps 8. Includes "guardian" features for parents


Weakness of the technology	<ol style="list-style-type: none"> 1. Each user needs their own Google account 2. Parents can opt children out of account creation 3. Not a video solution 4. Doesn't communicate well with outsiders
Why using in education?	It's easy to keep your digital lesson plans, schedules, syllabuses, grades, and materials in one place.
Main interface issues	Google also works continuously to make the user interface interactive and hence, continually asks for input from educators to continue making changes and change it into a better platform.
Official guidelines for users (links)	https://edu.google.com/training-support/setup-guides/
Resources links	https://edu.google.com/intl/ALL_nz/why-google/our-commitment/

Description of Edmodo.

Title of the technology	Edmodo
Identifying logo	
Open source (yes/no)	Yes
Official website	https://new.edmodo.com/?go2url=%2Fhome
Key Features:	Edmodo is firmly rooted in K-12 education, and rather than offering tools for creating standalone online courses, its electronic features are complementary of traditional classes and conducive to blended learning initiatives.
Strengths of the technology	<ol style="list-style-type: none"> 1. Affordable. 2. Facebook-like interface with a promising new Messaging feature. 3. Student, Teacher, and Parent views. 4. Useful third-party integrations. 5. Spotlight makes sharing resources simple.

	6. Common Core micro-assessments.
Weakness of the technology	<ol style="list-style-type: none"> 1. Lacks rigorous assessment-management tools. 2. While the platform integrates with various Student Information Systems, it does not support Learning Tools Interoperability (LTI).
Why using in education?	Edmodo offers an extensive electronic knowledge base (Spotlight) and a series of low-stakes micro-assessments designed to boost performance on Common Core standards (Snapshots).
Main interface issues	Edmodo also provides tight integrations with Microsoft and Google that allow students to log in using Google or Microsoft credentials (via SSO) and access Google Drive or Microsoft Office 365 libraries within the LMS. (In fact, for mixed platform districts, Edmodo allows students to log into <u>both</u> platforms simultaneously.) The platform automatically creates digital copies of Drive and 365 documents, which students may submit as assignments.
Official guidelines for users (links)	https://huntsd.org/wp-content/uploads/2015/10/Edmodo-for-Students.pdf
Resources links	https://support.edmodo.com/hc/en-us

Description of Office 365 Education

Title of the technology	Office 365 Education
Identifying logo	 Office 365 Education Enhancing collaboration and productivity
Open source (yes/no)	Yes
Official website	https://www.microsoft.com/en-us/education/products/microsoft-365

Key Features:	The suite's core apps—Word, Excel, PowerPoint, and Outlook—have been growing and changing for almost forty years, and they're stuffed with features that can make them seem heavy and unwieldy compared to relative newcomers like Apple's Pages and Numbers . Also, Microsoft still uses a single app, Outlook, for the email, contacts, calendar, and to-do-list features that other vendors, such as Apple and Google, have separated into smaller, sleeker apps that work together smoothly.
Strengths of the technology	<ol style="list-style-type: none"> 1. Most powerful office apps of any competitor 2. Available on almost all platforms 3. Smooth collaboration features 4. Elegant, user-friendly interface with extensive help features 5. All-in-one app for mail, contacts, and calendar
Weakness of the technology	<ol style="list-style-type: none"> 1. Problems accessing documents through web browsers during testing 2. Automated features in Word produce some unpredictable results 3. Some advanced features can be hard to access
Why using in education?	Build collaborative classrooms, connect in professional learning communities, and connect with colleagues when you get Office 365 – which includes Microsoft Teams and is free for your entire school. Access all the training and support you need to create a safe, secure, and collaborative learning environment.
Main interface issues	Microsoft 365—the new name for the apps and services formerly known as Office 365—is the behemoth of office suites and the one that every competitor tries to match. It runs almost everywhere, with full-featured editions for Windows and macOS, surprisingly powerful apps for iOS and Android, and slick web-based versions. Microsoft 365 has all collaborative features found in cloud-only suites like Google Workspace, plus all the benefits of disk-based apps: speed, security, and the ability to work offline.
Official guidelines for users (links)	https://www.microsoft.com/en-us/education/products/office
Resources links	https://www.pcmag.com/reviews/microsoft-365-personal

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