

Learning Management Systems and the Future of Education: Whitepaper on the Implementation of LMS in the k-12 Learning Environment

Learning Management Systems: What are they?

Learning management systems (LMS) are essentially technology enabled environments for learning. Many learning institutions and corporations implement learning management systems to support learning content, or organize all of the learning content for education or training for a specific course. There are 3 distinct types of learning management systems: Academic LMS, Corporate LMS, and Integrated LCMS-LMS. Their labels, however, do not necessarily communicate how useful they are to a specific organization. Academic institutions frequently employ the use of Corporate LMS, and corporations may use a mix of Academic LMS (ALMS), Corporate LMS (CLMS), and Integrated LCMS-LMS. The question remains: For the K-12 environment, which type of LMS is most useful, and what types of problems in the K-12 environment can an LMS solve? The subtle differences between the three different types of LMS will be discussed in subsequent sections of this whitepaper, and the usefulness of them in the context of the K-12 environment will be discussed as well. When the type of LMS that would best benefit our learning environment is identified, specific LMS recommendations can be made.



What problems can an LMS potentially solve in the K-12 education setting?

An appropriate LMS can solve some problems that both teachers and students are faced with. For teachers, an LMS can help with the management of learning content, and perform analytics in an automated fashion. For

students, it can provide interactive activities, allow them to interact with their peers, and allow them to stay organized since all of the learning content is in one place. They can help automate most aspects of the learning process, and have tools for content creation and management. Additionally, they allow learners to interact with LMS content at their own individualized pace, and with the need for personalized learning, implementing an LMS makes sense. Also, an LMS can help keep track of mandatory staff training that needs to be administered each year. Not all LMS are created equally, but with careful consideration of the features of each, we can make a decision to begin implementing one this coming school year that can really transform the way we educate our student body.

Corporate Learning Management Systems (CLMS)

CLMS are the most abundant category of LMS. They are used to administer course content to employees, and in some cases, customers and business partners (Foreman, 2018). A CLMS allows the administrator to:

- Create and configure web based and instructor led-programs for employees
- Manage class schedules and resources like classrooms, equipment, and instructors
- View rosters
- Track attendance, scores, and progress
- Run reports

A CLMS allows the learners to:

- Browse course catalogs to register for classes
- Launch web-based programs
- Receive emails
- Earn credits
- View transcripts

Typically, a CLMS is used to administer training to employees. It usually includes a set of courses that an employee is to complete on their own, and is usually meant to provide training on sales skills, customer service, products, policies, procedures, orientation, or soft skills.

Integrated LCMS-LMS

An integrated LCMS-LMS is similar to a CLMS, but has added capabilities of developing and managing learning content. It is targeted towards organizations that develop their own instructional programs (Foreman, 2018). It is most often used by businesses and organizations that:

- Design and deliver their own employee training
- Deliver courses to members
- Sell courses to customers

This type of LMS is not typically used by organizations that do mostly instructor-led training.

Academic Learning Management Systems (ALMS)

ALMS administrators are primarily instructors, professors, or teachers. They allow administrators of the LMS to:

- Manage lessons and assignments
- Post learning content, goals, and schedules
- Provide interactive activities to learners
- Upload and download multimedia materials
- Send messages
- Send multimedia feedback
- Post discussion board topics
- Establish student groups and collaborative workspaces for breakout sessions

An ALMS allows learners to:

- Interact with course materials and discussion board topics
- Collaborate with peers and instructors
- View grades and feedback

Key Features

The Three LMS are compared in the figure below based on their key features, as explained in *The LMS Guidebook: Learning Management Systems Demystified (Foreman, 2018)*

Features	Academic LMS	Corporate LMS	Integrated LCMS-LMS
User Management	<ul style="list-style-type: none"> > Users usually created manually by the instructor > Single sign on usually not needed > Coursework is compiled in a portfolio > Admin has full control over user permissions and the classes they teach 	<ul style="list-style-type: none"> > Contain user accounts consisting of unique personally identifiable information > Users may be imported from an HR manager > When implemented in a corporate setting, both often use single sign-on to allow users to access multiple corporate systems with a single login. > Permissions can be assigned > User profile is a collection of data to describe the user of the LMS 	<ul style="list-style-type: none"> > Has an additional set of users that create instructional programs > Has additional set of development roles other than administrator and learner (i.e. course developer, graphics artist, audio and video developer, and subject matter expert) > Collaborative authoring
Course Management	<ul style="list-style-type: none"> > Allows posting of lessons and assignments > Course syllabus and schedule can be accessed at any time > Interactive learning activities like surveys, quizzes, and polls can be posted > Multimedia course materials included > Web conferences 	<ul style="list-style-type: none"> > All courses included in a catalog > Self-paced or event-based courses, with a start and end date or location specifics > Prerequisites, completion certificates, and credits clearly communicated > Courses may be 	<ul style="list-style-type: none"> > Allows for the collaborative authoring of course content > Includes a searchable content library > Global change capabilities as users may come from many different places and access material at different times

	<ul style="list-style-type: none"> > Students can message each other and the professor > Discussion topics > Breakout sessions and student collaboration 	structured in a variety of ways with any combination and sequence of tutorials, assignments, surveys, and tests.	<ul style="list-style-type: none"> > Customizable layout templates and skins > Content can be reused by other users of the LMS > Training can be tracked > A personalized list of active courses and a transcript for each user is available
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Due to the diverse needs of our institution, I think that an Academic LMS and a Corporate LMS can help us solve the problems we are facing in regards to effective and efficient staff training, management of learning content, and student engagement.

References

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