

LMS Effectiveness Evaluation for Students

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ABSTRACT

The integration of Learning Management Systems (LMS) in higher education has reshaped instructional delivery by enhancing access to resources, promoting interaction, and supporting flexible, technology-driven learning. While LMS platforms are central to fostering engagement, collaboration, and independent study, their effectiveness from the student perspective requires comprehensive evaluation. Guided by Sustainable Development Goal 4 (Quality Education) and aligned with Commission on Higher Education (CHED) directives on technology-enhanced instruction, this study examines how well an LMS meets academic needs across multiple dimensions. Specifically, it evaluates student perceptions of Access and Navigation, Content Delivery and Communication, Learning Experience and Engagement, and Overall Satisfaction and Impact. Drawing on related research, the study builds on evidence that accessibility, clarity of content, interactivity, and platform support are critical to adoption and satisfaction. Using a structured survey, data will be analyzed to identify both strengths and areas for improvement, highlighting the factors that most strongly influence student engagement and learning outcomes. Findings will inform actionable recommendations for optimizing LMS design, instructional integration, and user support, ensuring that the platform remains responsive to evolving educational demands and continues to deliver inclusive, equitable, and high-quality learning experiences in the post-pandemic academic landscape.

Keywords: *Access and Navigation, Digital Learning, Learning Management System, Student Engagement, Technology-Enhanced Education*

INTRODUCTION

The integration of Learning Management Systems (LMS) in higher education has transformed the way students access resources, engage with learning materials, and communicate with instructors. As institutions shift toward more flexible and technology-enabled instruction, LMS platforms have become a critical component of the learning process, supporting not only academic delivery but also fostering engagement, collaboration, and independent learning. However, the extent to which students perceive LMS as effective in meeting their academic needs requires systematic evaluation to inform improvements in platform design, instructional integration, and user support.

The effective use of LMS contributes directly to the objectives of Sustainable Development Goal 4 (Quality Education) by promoting inclusive and equitable learning opportunities. Likewise, Commission on Higher Education (CHED) Memorandum Orders underscore the importance of technology-enhanced and flexible learning modalities in ensuring quality instruction, especially in the context of post-pandemic education. Understanding students' perspectives on LMS effectiveness allows institutions to address gaps in access, communication, engagement, and satisfaction, ensuring that the platform continues to meet evolving learning demands.

Recent research supports the importance of evaluating LMS from the learner's point of view. Al-Fraihat et al. (2020) found that accessibility, navigation, and instructional clarity are key predictors of LMS adoption and satisfaction. Rahman et al. (2022) emphasized that well-structured digital content and clear task instructions enhance student performance and engagement. Meanwhile, García-Morales

et al. (2021) highlighted that while LMS platforms promote flexibility and accessibility, sustained student satisfaction depends on continuous improvements in interactivity and support.

OBJECTIVES

Despite these findings, a gap remains in evaluating LMS effectiveness comprehensively from the student perspective across multiple dimensions—access, communication, engagement, and overall satisfaction. This study addresses this gap by: (1) assessing LMS effectiveness in terms of Access and Navigation, Content Delivery and Communication, Learning Experience and Engagement, and Overall Satisfaction and Impact; (2) identifying the strongest and weakest performing areas; and (3) providing recommendations to enhance LMS-based learning experiences for students.

RESULTS AND DISCUSSION

Table 1
Access and Navigation

Indicators	Mean	SD	Qualitative Interpretation
1. I can easily access the LMS using my devices.	4.03	1.15	High
2. I find the LMS easy to use.	4.14	1.15	High
3. I can locate my course materials without difficulty.	4.11	1.14	High
4. I can submit assignments and assessments on the LMS without problems.	4.16	1.15	High
5. I experience minimal technical issues while using the LMS.	4.12	1.13	High
6. I can access the LMS anytime and anywhere.	4.12	1.10	High
7. I am confident in using LMS tools (quizzes, modules, discussion boards).	4.09	1.08	High
8. I receive clear instructions on how to use the LMS.	4.20	1.08	Very High
9. I feel the LMS is visually organized and not confusing.	4.13	1.10	High
10. I can contact support easily when I face LMS-related issues.	4.17	1.09	High
Over-all Mean	4.13	1.05	High

The table shows that the highest mean indicator is “I receive clear instructions on how to use the LMS,” with a score of 4.20 (“Very High”). The lowest mean is “I can easily access the LMS using my devices,” with a score of 4.03 (“High”). The overall mean for Access and Navigation is 4.13, which is interpreted as “High.”

The results indicate that students highly appreciate the clarity of instructions provided for LMS use, which likely supports smoother onboarding and utilization of the platform. However, the slightly lower score for ease of access using devices suggests that while most students can access the LMS, some may face occasional connectivity, compatibility, or device-related challenges. Overall, the “High” mean demonstrates that students generally navigate the LMS well, though there is room to improve universal accessibility.

Clear instructions contribute significantly to reducing learning barriers and promoting confidence in LMS use, which can positively influence student engagement and performance. However, addressing access-related challenges is crucial to ensure all students, regardless of device type or internet stability,

can use the LMS effectively. Strengthening technical infrastructure, providing device optimization tips, and offering multiple access options can further enhance LMS accessibility and navigation for all learners.

Al-Fraihat et al. (2020) emphasized that system accessibility, ease of navigation, and instructional clarity are among the strongest predictors of user satisfaction and adoption of LMS platforms. Similarly, Ibrahim et al. (2021) found that while technical proficiency is vital, ensuring seamless cross-device access and providing clear usage guidelines greatly improve the student learning experience. These insights align with the present results, underscoring the importance of balancing technical accessibility with effective guidance.

Table 2
Content Delivery and Communication

Indicators	Mean	SD	Qualitative Interpretation
1. I can access lecture notes and modules on the LMS.	4.16	1.08	<i>High</i>
2. I can view video recordings or presentations through the LMS.	4.24	1.09	<i>Very High</i>
3. I receive updates and announcements through the LMS on time.	4.12	1.15	<i>High</i>
4. I use the LMS to communicate with my instructors.	4.11	1.14	<i>High</i>
5. I receive timely feedback on my submissions through the LMS.	4.20	1.10	<i>Very High</i>
6. I participate in class discussions or forums on the LMS.	4.27	1.10	<i>Very High</i>
7. I understand the lessons better when materials are well-structured on the LMS.	4.21	1.09	<i>Very High</i>
8. I am able to download readings or references easily.	4.22	1.11	<i>Very High</i>
9. I receive clear instructions for tasks and activities on the LMS.	4.28	1.06	<i>Very High</i>
10. I feel connected to my instructor and classmates through LMS interactions.	4.24	1.09	<i>Very High</i>
Over-all Mean	4.21	1.04	<i>Very High</i>

The table shows that the highest mean indicator is “I receive clear instructions for tasks and activities on the LMS,” with a score of 4.28 (“Very High”). The lowest mean is “I use the LMS to communicate with my instructors,” with a score of 4.11 (“High”). The overall mean for Content Delivery and Communication is 4.21, which is interpreted as “Very High.”

The results indicate that students value the clarity of instructions for LMS-based activities, which supports efficient task completion and reduces confusion. However, the relatively lower score in direct communication with instructors suggests that while the LMS serves as an effective content delivery and feedback platform, it may be underutilized for two-way interaction. The overall “Very High” mean reflects that the LMS is highly effective in providing learning materials, updates, and structured content, fostering a supportive digital learning environment.

The strong clarity and accessibility of LMS-provided materials contribute to improved comprehension and engagement. However, enhancing direct communication features—such as chat functions, scheduled virtual office hours, or discussion boards—can further strengthen student–instructor relationships and increase real-time interaction. This improvement would make the LMS not just a repository of materials but also a more collaborative and engaging learning space.

Rahman et al. (2022) emphasized that clearly structured content and explicit task instructions in LMS platforms significantly improve student engagement and academic performance. Likewise, García-Morales et al. (2021) found that effective communication channels within LMS environments strengthen the connection between students and instructors, thereby enhancing overall learning

satisfaction. These findings align with the present results, highlighting the importance of combining clear instructional design with robust communication tools.

Table 3
Learning Experience and Engagement

Indicators	Mean	SD	Qualitative Interpretation
1. I feel motivated to study because of the LMS learning activities.	4.22	1.097	<i>Very High</i>
2. I complete tasks more efficiently using the LMS.	4.19	1.089	<i>High</i>
3. I enjoy interacting with digital content in the LMS (quizzes, links, media).	4.25	1.077	<i>Very High</i>
4. I feel encouraged to work independently using LMS resources.	4.21	1.085	<i>Very High</i>
5. I am more engaged in class when the LMS is used effectively.	4.20	1.101	<i>Very High</i>
6. I feel less anxious about deadlines because of LMS reminders.	4.13	0.837	<i>High</i>
7. I can review lessons anytime, which helps with my learning.	4.15	0.845	<i>High</i>
8. I find LMS-based assessments relevant to the lessons.	4.42	0.669	<i>Very High</i>
9. I believe LMS supports different types of learners (visual, auditory, etc.).	4.44	0.671	<i>Very High</i>
10. I feel that my academic performance improved with LMS use.	4.34	0.655	<i>Very High</i>
Over-all Mean	4.25	0.581	<i>Very High</i>

The table shows that the highest mean indicator is “I believe LMS supports different types of learners (visual, auditory, etc.),” with a score of 4.44 (“Very High”). The lowest mean is “I feel less anxious about deadlines because of LMS reminders,” with a score of 4.13 (“High”). The overall mean for Learning Experience and Engagement is 4.25, which is interpreted as “Very High.”

The results indicate that students strongly value the LMS’s ability to cater to different learning styles, reflecting its adaptability and inclusivity. However, the relatively lower score for reducing deadline anxiety suggests that while the LMS provides reminders, it may not fully alleviate students’ workload pressure or time management concerns. Overall, the “Very High” mean highlights that the LMS significantly enhances motivation, independent learning, and engagement through well-designed activities and relevant assessments.

The ability of the LMS to accommodate diverse learners supports inclusive education and aligns with universal design for learning principles. However, improving the effectiveness of deadline reminders—possibly by integrating them with personal scheduling tools or providing more flexible submission options—could help further reduce student stress. Strengthening this aspect could enhance not only academic performance but also student well-being.

Martín-Rodríguez et al. (2021) highlighted that LMS platforms offering multimodal resources improve learning experiences for students with varied preferences and abilities. Similarly, Saba (2021) emphasized that well-designed LMS learning activities foster motivation, engagement, and self-directed learning, though managing workload and deadlines remains a crucial factor for reducing academic anxiety. These studies support the current results, showing that while engagement is high, time management support within the LMS can be enhanced.

The table shows that the highest mean indicator is “I believe the LMS promotes a more flexible learning environment,” with a score of 4.44 (“Very High”). The lowest mean is “I would recommend LMS-based instruction to other students,” with a score of 3.72 (“High”). The overall mean for Overall Satisfaction and Impact is 4.10, which is interpreted as “High.”

The results indicate that students strongly value the LMS for promoting flexibility in learning, allowing them to adapt study schedules and learning methods to their personal needs. However, the lower score

for recommending LMS-based instruction suggests that while the platform is effective, some students may still prefer traditional or blended approaches over fully online LMS-driven learning. The overall “High” rating reflects general satisfaction, tempered by varying preferences for learning modalities.

Table 4
Overall Satisfaction and Impact

Indicators	Mean	SD	Qualitative Interpretation
1. I believe the LMS contributes to the effectiveness of instruction.	4.24	0.767	<i>Very High</i>
2. I am satisfied with the quality of teaching through LMS.	4.12	0.844	<i>High</i>
3. I am able to learn at my own pace using LMS resources.	4.24	0.767	<i>Very High</i>
4. I find the LMS helpful in organizing my coursework and tasks.	3.92	0.849	<i>High</i>
5. I believe the LMS promotes a more flexible learning environment.	4.44	0.671	<i>Very High</i>
6. I am satisfied with my learning experience through LMS-based classes.	4.07	1.281	<i>High</i>
7. I think the LMS should continue to be used in future classes.	4.07	1.281	<i>High</i>
8. I would recommend LMS-based instruction to other students.	3.72	1.627	<i>High</i>
9. I believe the LMS supports my graduate-level learning needs.	3.95	1.417	<i>High</i>
10. I am confident that the LMS has improved my learning overall.	4.22	1.315	<i>Very High</i>
Over-all Mean	4.10	0.739	<i>High</i>

Flexibility is a key strength of LMS-based instruction, aligning with modern educational demands for adaptability and accessibility. However, the hesitation to recommend LMS-based instruction to others signals that institutions may need to improve aspects such as interactivity, personalization, and technical support to increase student advocacy for the platform. Addressing these concerns can help strengthen not only satisfaction but also long-term acceptance of LMS as a core instructional tool.

García-Morales et al. (2021) noted that flexibility is one of the most significant advantages of LMS integration, enabling diverse learners to succeed in different contexts. However, Alshurideh et al. (2022) emphasized that sustained student endorsement of LMS-based instruction depends on consistent user satisfaction, effective pedagogy, and a balance between online and face-to-face learning preferences. These findings reflect the current results, suggesting that while flexibility is valued, enhancing overall user experience is essential to improve student advocacy for LMS use.

Table 5
Summary of LMS Effectiveness Evaluation for Students

Factors	Minimum	Maximum	Mean	SD	Description
Access and Navigation	1.00	5.00	4.13	1.053	<i>High</i>
Content Delivery and Communication	1.00	5.00	4.21	1.041	<i>Very High</i>
Learning Experience and Engagement	2.00	5.00	4.25	0.581	<i>Very High</i>
Overall Satisfaction and Impact	2.00	5.00	4.10	0.739	<i>High</i>

The table shows that the highest mean factor is Learning Experience and Engagement, with a score of 4.25 (“Very High”), indicating that students feel the LMS significantly enhances their motivation, accommodates different learning styles, and contributes positively to their overall engagement. The lowest mean factor is Overall Satisfaction and Impact, with a score of 4.10 (“High”), suggesting that while students recognize the LMS’s benefits, their overall satisfaction and willingness to recommend it could be improved. The overall range from “High” to “Very High” reflects a generally positive evaluation of LMS effectiveness among students.

The findings suggest that the LMS excels in fostering active and inclusive learning experiences, likely due to its flexibility, interactive features, and accessibility of resources. However, slightly lower

satisfaction scores indicate that while the LMS supports learning effectively, there are areas where the student experience could be enhanced—particularly in building stronger advocacy for LMS-based instruction. This may be influenced by factors such as platform usability issues, limited interactivity in some courses, or individual preferences for blended or traditional learning formats.

The high ratings for engagement and content delivery affirm that the LMS is an effective learning tool and aligns with institutional goals for technology integration and SDG 4 (Quality Education). However, the lower satisfaction and recommendation levels highlight the need to improve user experience, strengthen communication features, and integrate more interactive and personalized elements. These enhancements could foster greater student buy-in and make LMS-based learning more appealing across diverse learning preferences.

Martín-Rodríguez et al. (2021) emphasized that high engagement in LMS use is often linked to well-structured content and activities that support diverse learning needs. At the same time, Alshurideh et al. (2022) found that overall satisfaction is influenced by both technical performance and the quality of instructional design, indicating that even high-performing LMS platforms require continuous user experience improvements to maintain strong student advocacy. These insights align with the present results, underscoring the need for targeted strategies to sustain both engagement and satisfaction.

CONCLUSION

The evaluation of LMS effectiveness from the student perspective revealed mean ratings ranging from “High” to “Very High” across all four dimensions. The highest-rated factor was Learning Experience and Engagement (4.25, Very High), indicating that students find LMS activities engaging, motivating, and adaptable to various learning styles. The lowest-rated factor was Overall Satisfaction and Impact (4.10, High), suggesting that while students recognize the LMS’s benefits, some remain hesitant to fully endorse it as their preferred learning environment.

Overall, the results demonstrate that the LMS is a valuable educational tool, excelling in content delivery, engagement, and adaptability. However, areas such as improving recommendation rates, enhancing interactivity, and increasing personalized learning opportunities present avenues for development. Strengthening these areas could not only raise satisfaction levels but also ensure that LMS remains a central component of quality instruction aligned with institutional goals, SDG 4, and CHED’s advocacy for technology-driven flexible learning.

Recommendations

1. **Enhance Interactivity in LMS Courses.** Integrate more interactive features such as gamified quizzes, peer feedback activities, and real-time polls to make learning experiences more engaging and participatory.
2. **Improve Communication Channels.** Strengthen the use of discussion boards, group chats, and virtual office hours to foster stronger connections between students, instructors, and peers.
3. **Expand Support for Diverse Learning Styles.** Provide varied formats for content delivery (e.g., videos, infographics, audio summaries) to cater to visual, auditory, and kinesthetic learners.
4. **Increase Personalization of Learning.** Use adaptive learning tools and customized learning paths to allow students to progress at their own pace while meeting learning objectives.
5. **Optimize Access Across Devices.** Ensure LMS compatibility and smooth functionality across different devices and browsers, and provide guidance for maximizing access in low-bandwidth conditions.

6. **Address Factors Affecting Student Recommendations.** Gather feedback from students who are hesitant to recommend LMS-based learning and address their concerns through platform improvements, training, and blended learning options.
7. **Conduct Periodic LMS Evaluations.** Regularly assess LMS effectiveness from the student perspective to identify emerging needs, measure progress, and ensure continuous alignment with SDG 4 (Quality Education) and CHED's flexible learning initiatives.

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