



ENHANCED LEARNER SATISFACTION: AN ASSESSMENT OF BLACKBOARD'S USABILITY AS A LEARNING MANAGEMENT SYSTEM AT THE OPEN UNIVERSITY OF MAURITIUS

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Abstract- *This study aimed to determine the level of satisfaction of first-time users of the Open University of Mauritius' Learning Management System (LMS). Surveys demonstrated that many tutors complained about the usability and adaptability of e-learning platforms: they perceived that the features were not user-friendly. Limited research across educational contexts, including Mauritius, has been conducted to discern and assess the usability and adaptability of Blackboard and the level of tutor satisfaction in using the new LMS. This becomes pertinently significant to understand in the context of Online Distance Learning (ODL), whereby most of the teaching and learning occur online. The study is based on the assumption that Blackboard is highly usable and adaptable to the extent that the students' learning is ascendant with more student engagement and proactivity. The questionnaire was employed as the methodology to collect data on the usability, the frequency, the level of satisfaction with the online features, tools and the support offered in their use of the new LMS. The findings of the study highlight that Blackboard facilitates the learning process with its user friendliness, enabling learners to capitalise on its use and statistical evidence demonstrate that the respondents were highly satisfied with the provided support. This paper recommends assessing the usability and adaptability of Blackboard as an LMS at the Open University of Mauritius to enhance learner engagement and learners' overall learning experience.*

Keywords: *adaptability, Blackboard, learning, satisfaction, usability.*

INTRODUCTION

The correlation between the usability and adaptability functionalities of an e-learning platform and the performance as well as satisfaction of the users, primarily learners, is a factor that measures the success of the institutional success in knowledge sharing. It is with this vision that the Open University of Mauritius (OUM) transitioned from the use of Moodle to Blackboard as an Learning Management System (LMS) in the wake of the e-learning concept across the globe. In maximising on the Learning Management System to enhance the teaching and learning experiences of both tutors and learners, the Open University of Mauritius has adopted the Blackboard e-learning platform to disseminate knowledge and harp on proactive learning activities in its aim student-centre learning pedagogical strategies. The Blackboard is a complex environment with the ability to handle different aspects of teaching and learning processes that make use of different technologies (Alturki, Aldraiweesh & Kinshuck, 2016), which have changed the learning facets and processes in higher education, in general, and at the Open University, in particular.

Over the past decades, the adoption of technology in educational institutions, particularly in universities, has significantly transformed how they deliver instructions, manage the teaching and learning process, and track the learning experiences of their learners. The Learning Management System (LMS) is a software application designed for the administration, documentation, reporting, tracking, and delivery of teaching, learning content, and e-learning resources. According to Sclater (2017), higher education institutions can streamline the academic processes, enable the facilitation of communication between tutors and learners, and promote more effective teaching and learning experiences in the online learning environment. There are, therefore, numerous benefits of using the LMS in higher education teaching and learning.



LMS platforms such as Google Classroom, Canvas, Moodle, and Blackboard are indispensable technological tools for online delivery in universities. With the Covid-19 pandemic and the shift to online and hybrid learning and teaching models (Johnson et al., 2021), LMS platforms use video conferencing, digital assessments, and online discussion forums to support the blended learning approach that is being adopted by even conventional brick-and-mortar universities. They foster accessibility and flexibility (Clark & Choi, 2023; Muller, 2021; Johnson & Bates, 2023); enhance learning outcomes through student engagement (Rath & Tan, 2022); and increase interactivity and support data-driven insights to ensure that personalised learning occurs (Garnett & Raj, 2024). Furthermore, according to Parker (2023), they promote collaboration among learners and even support data analytics that facilitate institutional decision-making.

The main features of Blackboard as an LMS are AI-powered personalisation, mobile accessibility, collaborative learning tools, a real-time virtual learning environment and more effective instructional design of the modules. First, artificial intelligence is integrated into Blackboard to support the learning pathways of each learner since the tutor may analyse learner behaviours and suggest tailor-made content for them. According to Sampayan (2024), when the learning pathways of learners are personalised, student engagement and the rates of completion are improved. Moreover, there is an increase in learner satisfaction as they more effectively meet the learning outcomes of the modules (Abubakar et al., 2024). Furthermore, learners can more easily have access to the learning and tutorial materials, submit their assignments online, and receive real-time notifications, at their own time and pace, as well as anywhere. From this perspective, Almelhi (2021) asserted that there is further learner engagement and learners improve their competencies in managing their time, particularly in the ODL context.

Many collaborative tools are embedded in Blackboard, namely group assignment tools, wikis, and online discussion forums. Othman, Hosen, and Nasr (2024) maintained that these tools with collaborative features promote interactivity and a collaborative and supportive learning environment. Collective learning productivity and active engagement among peers were observed. More significantly is the Blackboard Collaborate Ultra, which allows the tutor and the learners to have live online classes by having recourse to breakout rooms, screen sharing and chat during the lesson, and polls, and at the end of the class. Thus, there is not only feedback from the tutor to the tutor but also feedback from the learners to the tutor as well as among peers. This feature provides a leveraging of peer feedback in the virtual classes (Al-Khresheh, 2022). Learners can also view and review the recordings of the online classes conducted through Blackboard Collaborate Ultra. Finally, instructional design, which is tantamount to the effective planning of instruction, is very present in Blackboard. Content automation and AI Design Assistant are embedded in it. These features allow tutors to develop their course aligned with the learning outcomes, online activities and online assessment, which may be designed by AI on the platform (Sampayan, 2024). Therefore, the tutor can use more of their time to promote learner engagement and ownership of their learning (Abubakar et al., 2024). The students also benefit in terms of time management and learning organisation. Blackboard allows students to have quick access to the calendar of their study, submission dates of assignments, assignment questions and online tests, and interactive activities, and they may track their progress by viewing the Gradebook (Chaudhary, 2025).

However, several studies have highlighted numerous technical, usability, and adaptability issues that render the Blackboard LMS less reliable. According to Almelhi (2021), tutors mainly use Blackboard to deposit learning and teaching materials, assignments, and lecture presentation slides, and they give less importance to the interactive tools that are embedded in it. In a study conducted in Malaysia, it was found that tutors had difficulties making maximum use of the Blackboard interactive features for reasons like a lack of digital literacy and fluency, limited time to make it of them, and they were resistant to technological change and innovation (Kaur & Chuah, 2024). Thus, tutors need continuous professional development and upskilling programmes in technological usage and adoption.



Although Blackboard has numerous interactive features, learners prefer the traditional face-to-face classes. They do not receive sufficient support from the LMS to be motivated to actively participate and collaborate in the online learning environment of Blackboard. Alshammari (2021) maintained that Saudi learners cited low interaction levels in Blackboard online tutorial classes. From this same perspective, tutors in Malaysian universities could not promote interactivity because of the perceived complexity by learners and themselves and the limits of the Blackboard interface (Kaur & Chuah, 2024). In addition, it raises concerns over data privacy and security. Benali (2021) asserted that there is limited transparency about how and where data is stored and who may have access to it. This is despite Blackboard's emphasis on user privacy rights and protection. Finally, many universities find it difficult to align Blackboard with their non-academic administrative tasks or sections such as admissions, payroll, and attendance. This creates data silos and thus promotes administrative inefficiency and a lack of synergy by using Blackboard data.

From the foregoing paragraphs, it is obvious that the Blackboard is a practical platform that facilitates teaching and learning, although it has numerous disadvantages and limitations. However, there is a research gap in the context of higher education in Mauritius. No studies have been conducted to examine the adoption of Blackboard in the online delivery of studies by higher education institutions in the country. This is likely because the Open University of Mauritius is the only public university using Blackboard as an LMS since 2021, following the outbreak of the COVID-19 pandemic and the disruption of continuous blended learning for the learners. The current study attempts to examine the level of satisfaction of first-time users of the Blackboard LMS by describing the usability and frequency of learners at the university in using the new LMS. The findings of this first study should help in planning strategies to enhance learner satisfaction with using the LMS at the Open University of Mauritius.

RESEARCH METHODS

This study is purely quantitative. The data about the features of the Blackboard that are mostly used by the first-time users, the frequency of their use of the LMS, and their level of satisfaction in using Blackboard in their studies were collected by using a survey. Descriptive analytics is used to examine data or content, usually manually performed, to answer the question 'What happened?' and to describe what has happened in the past; it provides the context for understanding current practices and making predictions for future outcomes (Sharma *et al.*, 2020; Nourani, 2021). What happened to the frequency of using Blackboard, and what was its usability by learners when it was first introduced and used by the learners at the Open University of Mauritius? The study aims to study this and the descriptive analytics is the most appropriate research design. The research population included the first-time users of the new LMS. In this regard, the sample of the study was taken to be 300 students, and the response rate to the questionnaire in the Google form conducted on the LMS was 268 learners, which was a response rate of 89%.

The survey was conducted after having obtained the ethics clearance from the Research Ethics Committee of the Open University of Mauritius, and a pilot study was conducted with 25 learners who did not form part of the participants of the actual survey. The questionnaire had questions about the frequency of use of Blackboard, the occasions when the learners used the LMS, the use of the Calendar tool, the use of the features of the LMS, and the level of learner satisfaction in using Blackboard. The data collected were presented in graphs and charts to identify the trends in the use of the Blackboard by first-time users of the LMS.

RESULTS AND DISCUSSION

This section shows the answers to the examination of the level of learner satisfaction of first-time users of Blackboard. It provides the results on the frequency and usability of Blackboard at the Open University of Mauritius.

1. Frequency of the usage of the Blackboard LMS

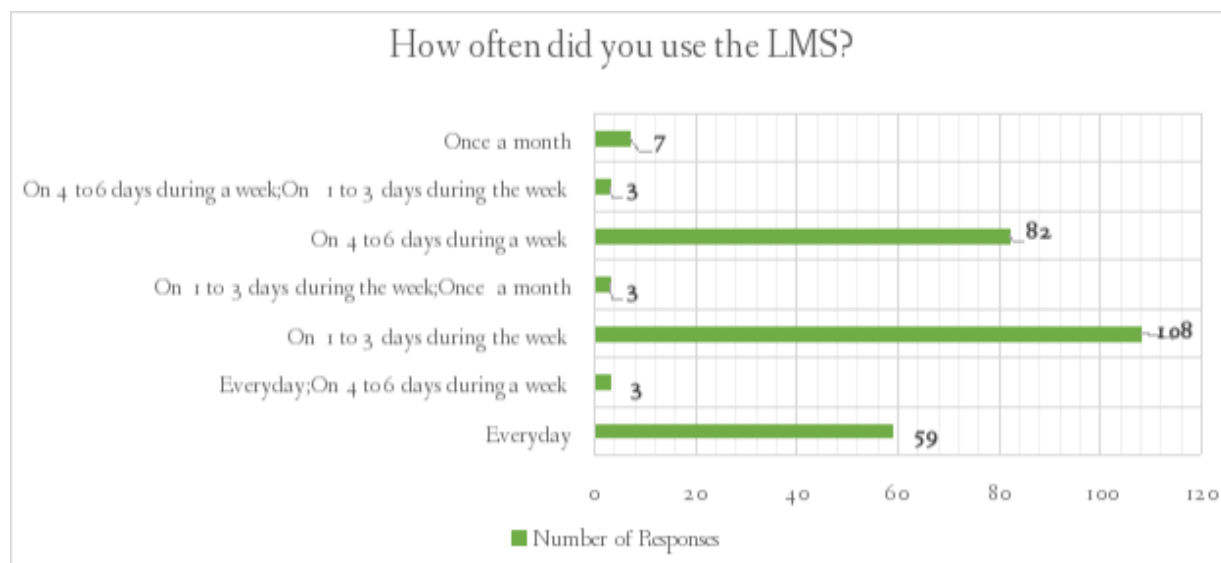


Figure 1: Frequency of using the Blackboard LMS

The figure shows that most learners (108) were using the LMS one to three days per week, 82 learners were using it on 4 to 6 days per week, and 59 learners were using it daily.



Figure 2: The occasions when the first-users used the Blackboard LMS

It is obvious that most learners (263) were using Blackboard LMS to download materials like manuals and assignment questions, 226 learners used it during the examination period, and the occasions when the first-timers used it was when they had to view their assignment.

2. The usage of the Blackboard LMS features

Blackboard has many features that are usable for the learners in their learning process. The learners were asked to choose five of the numerous features. The figure below shows the features of the LMS that they mostly like to use in their studies.

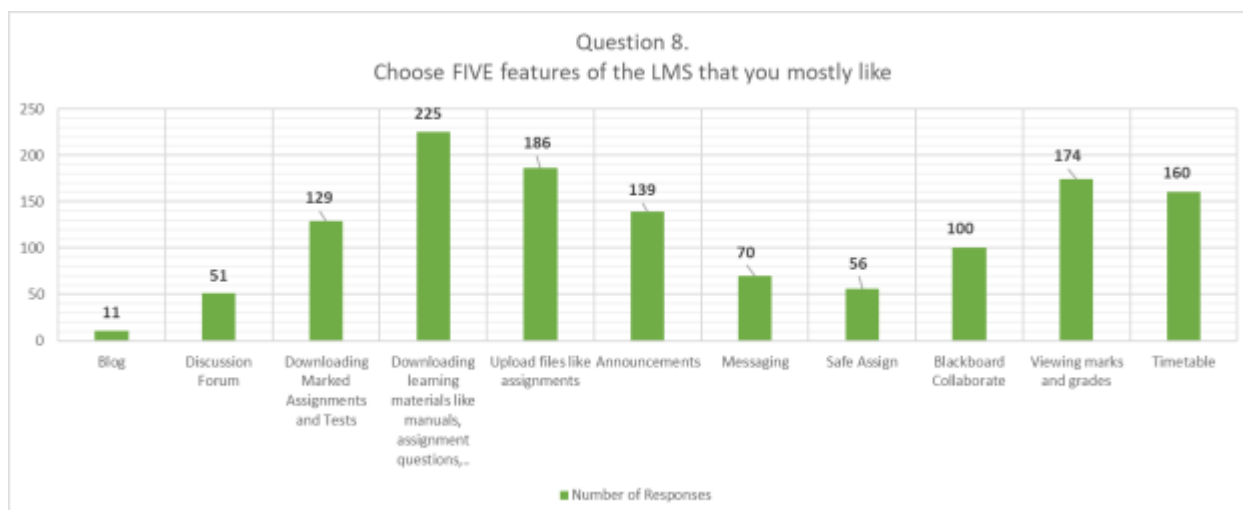


Figure 3: Features of the LMS that learners mostly like to use

Students mostly like downloading learning materials like manuals, assignment questions, etc. 225 learners do this particular task on Blackboard. Uploading of files like assignments is done by 186 learners, followed by viewing of marks and grades (174), and checking the timetable for the tutorial classes and the examinations (160). In contrast, the feature that learners hardly use is Blog (11), which proves that learners use the Blackboard particularly for their studies. They are working learners with professional and family commitments.

3. Level of learner satisfaction

Since the learners were using the Blackboard LMS for the first time, it was important to examine their level of satisfaction. This is shown in figure 5 below:

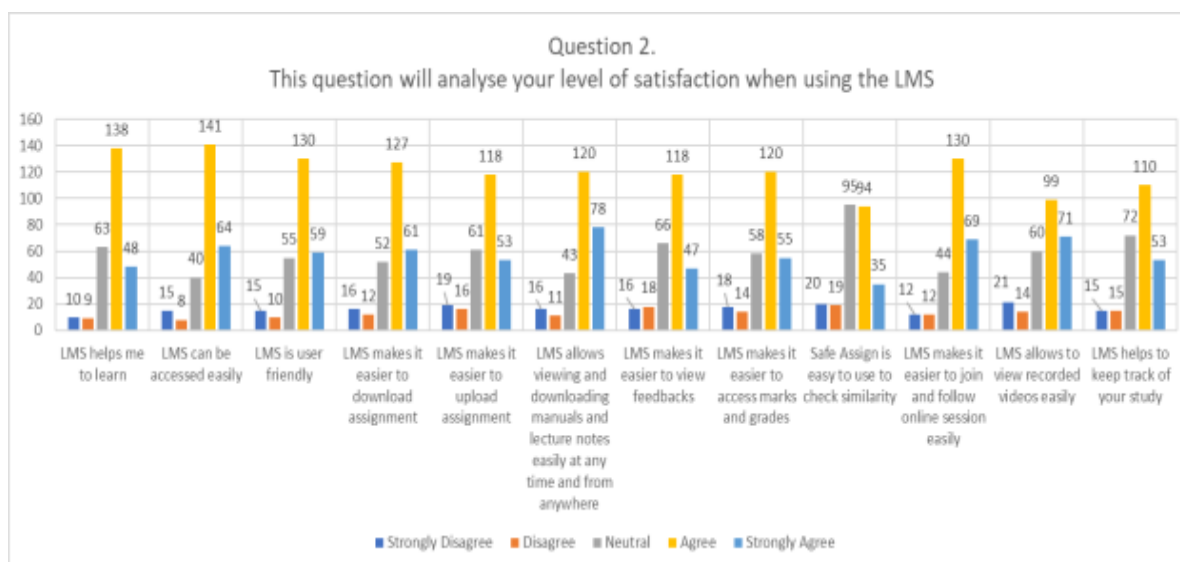


Figure 4: Level of learner satisfaction when using the Blackboard LMS

The learners at the Open University were very satisfied with Blackboard and its features, as it facilitates their learning journey. A high number of them agreed that the LMS can be accessed easily (141), helps them learn (138), is user-friendly (130), makes it easier for them to join and follow online sessions easily (130), makes it easier for them to download (127) and upload assignments (118), allows viewing and downloading manuals and lecture notes easily at any time and from anywhere (120), makes it easier to access marks and grades (120), makes it easier to view feedbacks from the tutor (118), helps to keep track of their study (110) and allows to view recorded videos easily (99).



However, the level of satisfaction of learners about SafeAssign being easy to use to check the similarity index is highly neutral (95), and it is even higher than those who agreed to the statement (94). This is mainly because they were previously used to Turnitin, while SafeAssign was completely new to them. However, those who strongly agreed and who agreed to the statement that SafeAssign is easy to use with Blackboard (combined 129) exceeded those with a neutral stance (95).

The findings of this study are insightful concerning the level of learner satisfaction when a new LMS, such as Blackboard, is introduced, particularly when they were previously used to Moodle. Overall, it shows a very high level of satisfaction from the first-time users of the LMS. This study found that first-time users of Blackboard at the Open University of Mauritius can easily access the LMS. In a study on the use of LMS in distance education in Malaysia by Annamalai, Ramayah, Kumar and Osman (2021), it was found that the ease of use of the Blackboard LMS was more important than its usefulness. Similarly, the Malaysian students found that they easily got access to their grade scores and content. Besides, the LMS is found to be more user-friendly, and this explained the high level of satisfaction of the university learners in this current study. This is consistent with the study of Bazelais et al. (2018), which found that learners would be more interested in using the LMS when they perceived it to be user-friendly, effortless, and therefore advantageous for them to learn. Progress tracking is an important element that raises the learners' level of satisfaction. Mohammed (2019) found that in addition to progress tracking, the LMS allows learners to view their progress report and even the personalised assessment that the tutor provides them on Blackboard.

Moreover, the learners were satisfied with their accessibility to the learning as they could easily view and download the materials and lecture notes. In a feedback survey conducted in 2004 at Duke University on the main functions of Blackboard for learners, 85% of learners found that Blackboard provided them with easy access to course materials and readings (Alokluk, 2018). In addition to this, Blackboard allowed them to have access these materials at anytime and anywhere, which is particularly important for the OUM learners who are professionals with family and social commitment. Downes (2005) showed that accessing Blackboard anytime and anywhere is highly significant to learners in the ODL context.

CONCLUSION

Learners at the Open University of Mauritius are highly satisfied with the use of Blackboard as the LMS. They have easy access to their learning materials and everything that would facilitate their learning. However, the availability of materials, feedback for the tutors, and having it as a depository are necessary but not sufficient for effective learning. This study did not consider the andragogical aspects of using Blackboard. The delivery of instruction may be considered as important, and learners' level of satisfaction in using it as a "glorified toolkit" (Missula, 2008), yet the socio-constructivist dimension of learning through the Blackboard LMS and the effectiveness of the institutional support for using it is essential. The "digital myopia" that emerges from this limited perspective about the usability of Blackboard should be examined and addressed to enhance learner satisfaction.

REFERENCES

1. Abubakar, A. A., Jazim, F., Al-Mamary, Y. H., Abdulrab, M., Abdalraheem, S. G., Siddiqui, M. A., Rashed, R. Q., & Alquhaif, A. (2024). Factors influencing students' intention to use learning management system at Saudi universities: A structural equation modelling approach. *Health Systems and Policy*, 34(1), 1-12. <https://doi.org/10.3233/HSM-220181>
2. Al-khresheh, M. H. (2022). Revisiting the effectiveness of Blackboard Learning Management System in teaching English in the era of COVID-19. *World Journal of English Language*, 12(1), 1-10. <https://doi.org/10.5430/wjel.v12n1p1>
3. Almelhi, A. M. (2021). The role of the Blackboard LMS in EFL course delivery during the COVID-19 pandemic: Investigating attitudes and perceptions of faculty and students. *International Journal of English Linguistics*, 11(2), 46-58. <https://doi.org/10.5539/ijel.v11n2p46>



4. Alokluk, J. A. (2018) The Effectiveness of Blackboard System, Uses and Limitations in Information Management. *Intelligent Information Management*, 10, 133-149. <https://doi.org/10.4236/iim.2018.106012>
5. Alshammari, F. S. (2021). Blackboard as an online learning management system in Saudi context: Challenges and prospects. *International Journal of Computer Science and Network Security*, 21(6), 187-192.
6. Annamalai, N., Ramayah, T., Kumar, J. A., & Osman, S. (2021). Investigating the Use of Learning Management System (LMS) for Distance Education in Malaysia: A Mixed-Method Approach. *Contemporary Educational Technology*, 13(3), ep313. <https://doi.org/10.30935/cedtech/10987>
7. Bazelais, P., Doleck, T., & Lemay, D. J. (2018). Investigating the predictive power of TAM: A case study of CEGEP students' intentions to use online learning technologies. *Education and Information Technologies*, 23(1), 93-111. <https://doi.org/10.1007/s10639-017-9587-0>
8. Benali, S. (2021). A case study of the LMS "Blackboard" through the lens of data protection policies in higher education institutions. *International Journal of E-Learning & Distance Education*, 36(2). <https://www.ijede.ca/index.php/jde/article/view/1214>
9. Clark, D., & Choi, S. (2023). Innovations in LMS: Enhancing Student Engagement in Higher Education. *Journal of Educational Technology*, 48(2), 35-50.
10. Downes, S. (2005). E-Learning 2.0. <http://www.downes.ca/post/31741>
11. Garnett, S., & Raj, R. (2024). The Evolving Role of Learning Management Systems in the Future of Higher Education. *Education and Information Technologies*, 29(1), 112-130.
12. Johnson, L., & Bates, T. (2023). Learning management systems: Enhancing access and engagement in modern education. *International Journal of Educational Technology*, 10(2), 89-102. <https://doi.org/10.1016/j.ijetc.2023.04.002>
13. Johnson, N., Adams Becker, S., Cummins, M., & Estrada, V. (2021). *The Horizon Report: 2021 Edition*. EDUCAUSE.
14. Kaur, A., & Chuah, S. M. (2024). Benefits and challenges of using Blackboard with strategies to overcome them. *International Journal of Academic Research in Business and Social Sciences*, 14(2), 205-216. <https://hrmars.com/index.php/IJARBSS/article/view/22450>
15. Missula, S. (2008). Staff perceptions of Blackboard as an online Teaching Tool in tertiary education. Unpublished PhD thesis, Unitec, Auckland.
16. Mohammed, O. N. (2019). The Effectiveness of Using Blackboard Learning Management System on EFL Learners' Performance: A Case Study of University Students. *International Journal of Science, Engineering and Technology Research*, 8(9), 463-482.
17. Muller, J. (2021). Exploring the Adoption of LMS in Traditional Universities. *Journal of Digital Learning*, 38(3), 102-118.
18. Othman, Y., Housen, N., & Nasr, N. (2024). The impact of using Learning Management System "Blackboard" on academic achievement and student learning motivation. *Journal of International Crisis and Risk Communication Research*, 7(S11), 260-277. <https://doi.org/10.63278/jicrcr.vi.326>
19. Parker, A. (2023). The Role of Data Analytics in Learning Management Systems: A Case Study Approach. *Journal of Educational Data Science*, 15(1), 45-61.
20. Rath, R., & Tan, K. (2022). Adapting to the New Normal: LMS Use Post-COVID in Higher Education Institutions. *International Journal of Educational Technology*, 40(2), 89-105
21. Sampayan, E. L. (2024). Blackboard Learning Management System—An artificial intelligence approach: Challenges and prospects in nursing education. *International Journal of Science and Healthcare Research*, 9(1), 230-234. <https://doi.org/10.52403/ijshr.20240129>
22. Sclater, N. (2017). Learning Management Systems in Higher Education: A Systematic Review. *Educational Technology & Society*, 20(4), 1-15