

A Study On The Effectiveness Of Urox As Odl E-Learning Management Platform In Unirazak University

Mustafa Bin Dakian¹, Lailatul Insyirah Binti Mustafa²

¹Lecturer at Tun Abdul Razak Graduate School (TRGS), Universiti Tun Abdul Razak (UNIRAZAK), Kuala Lumpur
mustafadakian@gmail.com

²School Teacher, SK Presint 15, Persint 15, Putrajaya Wilayah Persekutuan
Lailatul.insyirah1998@gmail.com

ABSTRACT: *The integration of a learning management system (LMS) into higher education and other educational levels has become a significant factor in the adoption of digital learning approaches. With a vast array of options available, making accurate decisions in this dynamic landscape poses challenges. The purpose of this paper seeks to streamline the selection process and ensure the most suitable match LMS for an institution's particular goals and needs. This research primarily centres on the investigation of free e-learning platforms, chosen for their cost-effectiveness and alignment with the study's specific scope. The methodology of this study is employed a quantitative approach with cross sectional research design which apply the convenience sampling technique by 123 respondents selected by utilizing an online survey to collect and record domain. There are 6 constructs has been analyze such as Course Contents, Course Delivery & Learning Engagement, Course Assessments, Interaction Lecturers-Students, Lecturer Professionalism and UROX. Overall, the mean average for all constructs are more than 4.5 over 5.0 of rating of Likert scale. The findings of result revealed that lecturers and students are showed a preference UROX applications came to teaching and facilitation. Several factors contributed to this preference, as evident from the analysis of the collected data, which fell into three main categories: functional suitability, compatibility, and portability. The practical implication of this study is hoped that this study will help UNIRAZAK educators-students to comprehend the suitability of technology for learning and the exchange of knowledge to benefit the students and institution in general. Learning Management System (LMS) is an online software system that allows for the administration, delivery, and tracking of educational courses, training programs, or learning and development programs. LMS platforms have become increasingly popular in recent years as a tool for managing and organizing educational content, facilitating communication and collaboration, and measuring student progress. In the context of lecturers education, LMS systems can play a crucial role in supporting and enhancing lecturer training programs. The contributions of study is use of LMS in educators education has gained significant attention in recent years. LMS is a software application that provides a platform for managing and delivering educational content, as well as tracking student progress and assessing learning outcomes.*

Keywords - Lecturer Education, Academic Learning Achievement, Learning Management System (LMS), Continuous Learning, UROX Applications

1. INTRODUCTION

The world is in the process of shifting towards a knowledge-based economy, where there is a swift and continuous expansion of information. The nature of this information is becoming progressively more specialized and complex. As a result, it becomes imperative for university instructors to equip students with the ability to engage in self learning and independent study (Khoa et al., 2020). The learning management system (LMS) serves as an educational platform that offers a comprehensive solution for teachers, learners, and institution managers to publish, collaborate, and share educational resources (Thuseethan et al., 2014; Prahani et al., 2022). The incorporation of a learning management system (LMS) in higher education or other educational levels has emerged as a prominent consideration in the implementation of digital learning methods (Alias et al., 2021). Professionals and specialists stress the importance of aligning the role of the LMS with established teaching and learning theories (Prahani et al., 2022). Its purpose is to detect disparities in teaching and learning, automatically analyze the data, and generate reports. Given its e-learning nature, it emphasises the delivery of materials and resources in both asynchronous and synchronous formats. The appearance of Learning Management Systems (LMS) can vary, with one example being Computer-assisted Learning (CAL). A Learning Management System enables educators to unite all stakeholders within a single platform

In the beginning, e-Learning was just an optional nature of learning, lacking a mandatory policy to encourage staff participation. However, the situation underwent a profound transformation during the COVID-19 pandemic, when stringent social distancing measures were implemented. Lecturers received guidance to conduct their classes remotely, ensuring that students could access learning materials and attend lectures from a distance. Lecturers began recording their lectures and disseminating them to students who were subject to lockdown measures across the country (and even overseas), utilising tools like LMS and various Web 2.0 platforms. Similarly, in Malaysian context, in order to maintain the continuity of lessons, educators have embraced the mode of e-teaching, employing a range of technologies such as video conferencing platforms like Zoom, Cisco Webex, Microsoft Teams, Google Meets and Google Classroom with the last two platforms as the most

popularly used in academic settings. Additionally, they have also utilized communication tools like WhatsApp and Telegram to facilitate interaction.

The implementing of Learning Management System in education allows instructors to keep track of a learner's progress in terms of course completion, identification of knowledge gaps, participation and engagement level, and time is taken to complete the course. According on how effective the system is at that particular educational institution, the instructor may include chat, conferencing, and discussion forums to alleviate the boredom of a class session. This method differs from standard methods or styles of teaching, students are more enthusiastic to learn the subject when it is employ. Also, it improves the communication between the instructor and the pupils. Because they can access the learning activities and lectures that have been recorded through the LMS, students won't have to worry about missing out on class lectures and activities. The current study examines how well students use LMS in teacher education.

The benefits of LMS in lecturers education by using the UROX LMS Platform as shown in Figure 1. It is ability to provide a centralized platform for course content, resources, and assignments. This can be especially useful for lecturer training programs that have multiple instructors, as it allows for a consistent, organized approach to course content delivery. Additionally, LMS can provide access to a range of multimedia resources, including videos, interactive simulations, and virtual classrooms, that can be used to enhance the learning experience for lecturer trainees. The tools for communication and collaboration between instructors and trainees-: LMS also offer a range of tools for communication and collaboration between instructors and trainees. Discussion forums, chat rooms, and messaging systems can be used to facilitate discussions and collaboration between trainees, while features such as assignment submission, grading, and feedback tools can streamline the process of course assessment and evaluation. LMS also offer analytics and reporting features, allowing instructors to track student progress, identify areas of weakness, and adjust course content as needed.

Figure 1 : The Interface of UROX LMS Platform



Source: <https://urox.instructure.com/courses/19914>

However, there are also challenges associated with the use of LMS in lecturer education. One of the main challenges is the need for technical skills and support. Many lecturers may not be familiar with the technology and require training to use the LMS effectively. Another challenge is the time and effort required to develop and deliver high-quality learning content. In addition, there is a risk of over-reliance on LMS, which may result in the neglect of other important aspects of lecturer education, such as face-to-face interaction and practical experiences. LMS also offer a range of administrative benefits for lecturers education programs. These systems can automate tasks such as course registration, payment processing, and certification management, freeing up administrative staff to focus on other tasks. Additionally, LMS can provide valuable data on course completion rates, student satisfaction levels, and other key metrics that can be used to evaluate the effectiveness of lecturer training programs.

LMS play an important role in lecturer education by providing a platform for lecturer to manage and deliver content, facilitate communication and collaboration, and assess student Learning. Here are some ways in which LMS can benefit lecturer education in Table 1.

Table 1: The Benefits of LMS in Education and Learning

| Element | Description |
|-----------------------------------|--|
| 1.Course Management | <ul style="list-style-type: none"> • LMS can help lecturers organize and manage their courses more efficiently. Lecturers can create course syllabi, schedules, and assignments, and students can access these materials online. This can save time and resources, and ensure that students have access to course materials at all times |
| 2.Communication and Collaboration | <ul style="list-style-type: none"> • LMS can facilitate communication and collaboration among lecturers and students. Teachers can create discussion forums, chat rooms, and messaging tools to enable students to interact with each other and with the lecturer. This can help build a sense of community and engagement in the course. |
| 3.Assessment and Feedback | <ul style="list-style-type: none"> • LMS can help lecturers assess student learning and provide feedback. Lecturers can create quizzes, assignments, and exams that are automatically graded, and provide feedback to students on their performance. This can help lecturers identify areas where students need additional support and provide personalized feedback to each student. |
| 4.Personalization | <ul style="list-style-type: none"> • LMS can be used to personalize learning for each student. Lecturers can create adaptive learning paths that are tailored to each student's learning style, pace, and needs. This can help students learn more effectively and efficiently, and enable lecturers to provide targeted support where needed. |
| 5.Data Analytics | <ul style="list-style-type: none"> • LMS can provide lecturers with data analytics tools that enable them to track student progress and identify areas for improvement. Teachers can use this data to adjust their teaching strategies and provide targeted support to students who are struggling. |

Source : Research Findings (2025)

2.0. EMPIRICAL RESEARCH

The gain of this study is a deeper understanding of the factors influencing the acceptance and adoption of Learning Management Systems (LMS) among educators, it is pertinent to introduce the Technology Acceptance Model (TAM). TAM, proposed by Davis in 1989, is a well-established theoretical framework for examining users' acceptance of technology, especially within educational contexts. TAM consists of key constructs, notably perceived usefulness and perceived ease of use. Perceived usefulness refers to the extent to which a technology is believed to enhance job performance, while perceived ease of use concerns the degree to which a technology is seen as user-friendly (Davis, 1989). This model serves as the basis for examining educators' acceptance of Learning Management Systems (LMS). The integration of these additional constructs enhances the TAM framework, providing a comprehensive understanding of Malaysian educators' preferences

for Google Classroom and Microsoft Teams in terms of functional suitability, compatibility, and portability. For a visual representation of this extended TAM framework, please refer to Figure 1 below.

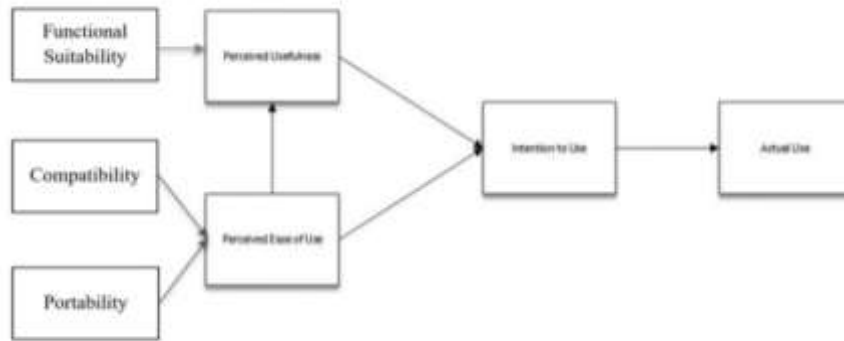


Figure 1: Extended Technology Acceptance Model (TAM) for LMS Evaluation

Source : Adapted by Davis (1989)

Figure 1 above is the Extended Technology Acceptance Model (TAM) for LMS Evaluation by Davis (1989). In this revised model, Functional Suitability, which relates to how well the system fulfils explicit and implicit requirements, fits naturally under Perceived Usefulness. Compatibility and Portability, which pertain to the system's ability to interact with other components and be smoothly transferred between environments, align more closely with Perceived Ease of Use. In the context of this study, we further extend TAM by incorporating three crucial evaluation criteria, as defined by Quadoud et al. (2017) in Table 2:

Table 2: The Three Crucial Evaluation Criteria of LMS

| Element | Explanation |
|---------------------------------|---|
| 1.Functional Suitability | <ul style="list-style-type: none"> Functional Suitability pertains to how well a product or system fulfils both explicit and implicit requirements by offering the necessary functions while operating within specified conditions. In the context of LMS, functional suitability refers to the effectiveness of the platform in meeting the explicit and implicit requirements of educators' teaching processes. |
| 2.Compatibility | <ul style="list-style-type: none"> Compatibility extends to the extent to which a product, system, or component can effectively communicate and interact with other products, systems, or components, and perform its intended functions seamlessly within a shared hardware or software environment. In terms of LMS, compatibility assesses the ability of the platform to integrate smoothly with educators' existing teaching methods and practices. |
| 3. Portability | <ul style="list-style-type: none"> Portability involves the level of effectiveness and efficiency with which a system, product, or component can be smoothly transferred from one hardware, software, or operational environment to another. In the context of LMS, portability relates to how easily educators can transition their teaching activities between different settings and devices. |

Source : Research Findings (2025)

The Learning Management Systems (LMS) are a cloud-based innovation that deals with the creation, and conveyance of E-Substance, generally utilized in the educating and learning area. With the assistance of a ground-breaking LMS apparatus, a lecturer can do these accompanying processes: **First**, to plan the learning meetings by adapting E-Learning as tool for advance learning. **Second**, to plan the substance for the E-Meetings and E-Learning that creates excitement and online learning freedom towards mentees. **Third**, to convey or direct the E-Learning and E-Meetings towards Students and Lecturers. **Fourth**, to cooperate with the Members of Learning Development. **Fifth**, to offer understanding materials and learning techniques. **Sixth**, to plan assessment and dole out to the students about E-Learning methodologies. **Seventh**, to assess the task by utilizing remedy devices to ensure that learning by LMS are effective to them. **Eight**, to produce final reports and by portraying the expectations to learn, and to adapt advance learning methods for the students.

With LMS, student finish the course and task inside the specified time. It makes learning more customized by giving moment criticism and presentations the report of individual execution. The normal answer and a rubric can help give

an unmistakable comprehension of the assumption or execution standard. With the utilization of these highlights, educators can make learning more customized and important. Difficulties like absence of satisfactory foundation and instructors in a disconnected climate get disposed of with LMS. Online schooling gives students a chance to gain from phenomenal instructors. With limitations on the term and recurrence of online classes by the Faculty service, and video conferencing devices alone won't do bad trick for E-Learning. LMS is a vital educational & the learning device for both coordinated and non-concurrent E-Learning. According to the exploration done by Department of Education, using Learning Management Systems (LMS) and other E-Learning platforms are very useful on both Students and Teachers on their E-Learning Developmental activities. During the primary period of the LMS executions, we choose different technical education groups that includes instructors who were keen on figuring out how to utilize the E-Learning stages. We included instructors from all evaluation levels and with shifting foundations, including specialized curriculum, education, and craftsmanship. Some centered around planning exercises while others are creating their poll evaluations. And some who developed the educational planning mechanism in the LMS programming, and other instructors were picked the highlights that they need to utilize towards E-Learning developments.

There are an assortment of combination techniques for implanting content into LMS were initially intended to be privately facilitated on-premise, where the association buys a permit to a variant of the product, and introduces it on their own workers and organization. Numerous LMS are currently offered as E-Learning programming as an assistance, with facilitating given by the sellers. Through LMS, instructors may make and coordinate course materials, articulate learning objectives, adjust substance and evaluations, track considering progress, and make redid tests for understudies. LMS permits the correspondence of learning destinations, and sort out learning timetables. LMS influence is that it conveys learning substance and devices directly to students, and it can likewise arrive at minimized gatherings through unique settings. Such frameworks have underlying adjustable highlights including evaluation and following. Hence, students can find continuously their advancement and educators can screen and impart the viability of learning. Quite possibly the main highlights of LMS is attempting to make a smooth out correspondence among students and teachers. Such frameworks, and other than encouraging internet getting the hang of, following learning progress, giving advanced learning different apparatuses, oversee correspondence, and possibly selling content, might be utilized to give diverse correspondence highlights.

Marilyn Cochran-Smith (2005) publish an article on *“The New Teacher Education: for better or worse”* This article offers a reading of the current state of the field of teacher education, identifying current reforms, emerging trends, and new underlying premises. The author argues that a “new teacher education” has been emerging with three closely coupled pieces: It is constructed as a public policy problem, based on research and evidence, and driven by outcomes. Illustrating and critiquing each of these pieces, the article makes the case that the new teacher education is both for the better and for the worse. The article concludes that education scholars who care about public education must challenge the narrowest aspects of the emerging new teacher education, building on its most promising aspects and working with others to change the terms of the debate.

Gary Sykes, Tom Bird, and Mary Kennedy (2010) publish an article on the *“Teacher Education : its problems and some prospect”* Based on an analysis of occupational competence in teaching and teacher education, this article draws together a set of dilemmas that face the field, arguing that an occupational analysis is needed to complement the more common institutional analysis of teacher education. Then, this analysis is used to evaluate the prospects of the reforms that currently are dominant in the policy discourse of teacher education. The article concludes with thoughts on some promising directions for the improvement of the field of teacher education.

Muhammad Arshad (2020) publish an article on *“Academic Semester Activities by Learning Management System during COVID-19 Pandemic: A case of Jazan University”* The COVID-19 has led to the shutdown of educational institutions around the world. Over 1.2 billion students are out of school globally. As a result of COVID-19, the education sector is facing a huge impact on universities forcing their teaching to shift to e-learning and mixed learning modes. During the current emergency, the LMS has been a vital resource for virtually all higher education institutions, and a driving force in online learning. After the announcement of University closures, Saudi Arabia is one of the nation where students are worried and going through a phase of learning, where they have no tutor, a lot of course work and only themselves to help them study. Jazan University transforms to E- learning mode of teaching after the suspension of regular classes. The primary focus of this study is to examine the academic semester activities of LMS, Blackboard, amongst faculty members of the Faculty of Arts and Humanities at Jazan University, Kingdom of Saudi Arabia. Furthermore, how the faculty members utilize the learning management system to support their students in the learning process, assessment and include them in the content in hand while they are teaching from home in the midst of the epidemic. The main outcomes of this study are: Role in the achievement of instructive information online, Suitable support provided to the students by faculty and teaching assistants and Contingency strategy for addressing unforeseen online educational system issues.

I. LEARNING MANAGEMENT SYSTEM (LMS) IN LECTURER EDUCATION

LMS is software design to manage and support efficient Learning. It is a complete teaching solution where instructors can upload course content, learners can access it through their profiles. The system supports both face-to-face learning and virtual classes. It also facilitates communication, tracks progress, and keeps records of all important data of students. While helps the instructors work efficiently, it also caters to the needs of the Learners. Overall, it a system that assists everyone involved in the teaching process thru LMS. Table 3 below show several features and capabilities of LMS for UROX in UNIRAZAK education and learning platform.

Table 3 : The Features and Capabilities of Learning Management Systems (LMS) for UROX in UNIRAZAK

| | |
|---------------------------------------|--|
| Features and Capabilities: | https://urox.instructure.com/courses/19914 |
| 1.) Content creation: | Allows instructors to author content and use web tools to embed files from the web or their own files into lesson materials. |
| 2.) Content management: | Allows instructors to share materials between courses and upload materials from the web or their own files. |
| 3.) Assessment creation: | Ability to create new questions/ assessments including support for various question types, randomization of MCQs, the ability to import third-party question banks etc.. |
| 4.) Assessment management: | This can include automatic updating of questions and automatic and manual marking. |
| 5.) Learning object repository (LOR): | An online library for sharing, storing, searching, and managing learning objects (e.g. content, specific lessons etc.). |
| 6.) Grading and feedback tools: | This can include the ability to annotate the student submissions and to create student reports. |
| 7.) Course management: | This can include course catalogs, course registration management, calendars, gradebooks, and virtual classrooms. |
| 8.) Student and instructor portals: | Individual portals for students/instructors to access course materials. |
| 9.) Collaboration tools: | Ability to comment and share on the LMS interface through channels such as live chat, blog articles, and discussion boards/threads. |
| 10.) Progress data and analytics: | Ability to track student progress against standards such as Common Core or NGSS, identify gaps in individual learning, and set customized learning objectives. |
| 11.) Other Applications: | Ability for an eLearning software and LMS to interact over a standard protocol. Some vendors offer more advanced capabilities or features aimed more at corporate buyers rather than education institutions: https://www.trustradius.com/learning-management-lms (2021): |

| | |
|--|--|
| | <p>Social media support: Ability to integrate social learning tools and keep track of student engagement.</p> <p>Mobile app: Allows students and instructors to connect to the LMS interface using a mobile application.</p> <p>Blended learning support: Ability to record, share, and assess off-line learning events such as seminars, workshops, demonstrations etc</p> <p>Gamification tools: Using game-mechanics in order to boost user engagement including things like badges, trophies, leaderboards, or points.</p> <p>E-commerce support: Ability to sell educational materials and/or online courses, track purchases, and monitor the performance of marketing initiatives</p> |
|--|--|

II. ADVANTAGE OF LEARNING MANAGEMENT SYSTEM (LMS) FOR BETTER RESULTS IN EDUCATOR EDUCATION

Table 4 : The Advantages of LMS

| Advantages | Explanations |
|--|---|
| 1. Centralized Education in Educator Education | <ul style="list-style-type: none"> The primary advantage of any LMS is its centralized source of learning. It allows educators education to save all e-learning content in one place instead of scattering it in different places. This helps to both reduce the risk of losing important data/content and increase the overall efficiency of the system. |
| 2. Supports Active Learning in educators education | <ul style="list-style-type: none"> Any learning experience can only be meaningful if its relevant and authentic. An LMS allows learners to engage in hands-on, relevant, and real-word activities for a fulfilling Learning Experience. |
| 3. Encourage Continuous Learning | <ul style="list-style-type: none"> LMS ensure that the content is readily available for both student and faculty members. Instructors can also continue to engage with materials on a regular basis and support proactive Learning strategies. |
| 4. Facilitate Constant Communication | <ul style="list-style-type: none"> LMS gives an opportunity for educators to share pedagogical resources, have one-to-one discussions with peers, and receive guided expert support through online discussions. |
| 5. Offers greater Flexibility and Space for Pedagogical Experiment | <ul style="list-style-type: none"> Unlike traditional classroom-based teaching, where the instructor follows a prescribed approach, online methods of teaching with the help of Learning Management System allow instructors to Experiment with the application of Various Learning Techniques such as blended Learning, flipped Learning, social Learning, rapid Learning, storytelling, and more depending on what works bet for the Learners. |

3.0. RESEARCH METHODOLOGY

Research Design

Research design of this study is quantitative by using Cross-Sectional research model. It was conducted to analyse the preference of UNIRAZAK Lecturers and Students in using UROX as LMS. These UROX platform is also chosen for their increasing popularity among Unirazak educators and students, especially after the ODL learning. The data was collected by using a online survey method. Survey method ensures that every participant, irrespective of their computer access or role within the organisation, fills out the same questionnaire. This method also offers researchers the opportunity, provided they possess the necessary programming skills, to leverage cutting-edge technology for incorporating various

question formats in the survey or for seamlessly collecting and storing data directly within a database system under Student Information System (SIS). In this specific survey research, the primary focus is on exploring the ODL e-learning platform due to their cost-effectiveness and their alignment with the specific scope of this study.

Sampling Design

Convenience sampling was used in this study with thirty respondents involved in the survey. Convenience sampling is cost-effective, simple, and involves readily accessible participants. The primary assumption underlying convenience sampling is that the 123 individuals within the target population share homogeneity. The population of this study consisted of students and educators in UNIRAZAK only. As educators, the subjects involved were individuals with sufficient experience in using Learning Management Systems (LMS) in UROX and had direct exposure to UROX whether in teaching or learning. These individuals were active users of LMS in the context of the new normal and had firsthand experience with both the advantages and disadvantages of these platforms in ODL.

Instruments

The instrument used in this study is online survey questions as Teaching Evaluation (TEVAL) that was adapted from Student Information System (SIS). There were 6 constructs and 29 questions. The 5 scale of Likert Scale is use in this study. The duration of Pilot Test will be organized during 3 months from 1st June 2025 -1 September 2025. The survey approximately took less than 15 minutes to complete and the respondents' feedback were received immediately after to be analyzed.

Data analysis

The data obtained from the questionnaires were analyzed by calculating the frequency with percentage, mean and ranking in each questions using IBM SPSS software.

4.0. DATA ANALYSIS AND RESEARCH FINDINGS

Demographic of respondents

Table 5: Demographic Respondents.

| Descriptive Analysis | Type | Frequency | Percentage (%) | Total Respondents | (%) |
|------------------------|--------------------|-----------|----------------|-------------------|-----|
| Gender | Male | 59 | 47.6 | 123 | 100 |
| | Female | 64 | 52.4 | | |
| Age | Below 30 years | 14 | 11.2 | 123 | 100 |
| | 31 – 40 years | 39 | 32.0 | | |
| | 41 – 50 years | 49 | 40.0 | | |
| | 51 – 60 years | 21 | 16.8 | | |
| | Above 60 years | 0 | 0 | | |
| Educational | TVET & certificate | 19 | 15.2 | 123 | 100 |
| | Postgraduate | 83 | 67.2 | | |
| | Undergraduate | 21 | 17.6 | | |
| Status | Educators | 23 | 18.7 | 123 | 100 |
| | Students | 100 | 81.3 | | |
| Experience in Use UROX | Not advance | 3 | 2.4 | 123 | 100 |
| | Moderate | 23 | 18.5 | | |
| | Advance | 42 | 33.9 | | |
| | More Advance | 55 | 45.2 | | |

Source : Research Findings (2025)

The above Table 5 show the Classification of Respondents Based on Descriptive Analysis which consists of gender of male and female totaling 123 respondents. The result shows that majority of the respondents are female of 64 respondents (52.4%) as compared to men of 59 respondents (47.6%). The researcher has also recorded age type is also one of the demographic profile aspects. Based on the outcomes, there are four categories of age range from below 30 years has showing 14 respondents (11.2%), age from 31 to 40 shows 39 respondents (32%), age from 41 to 50 shows 49

respondents (40%) and lastly age 51 and above which recorded as 21 respondents (16.8%). The educational background of the respondents is categorized from TVET & Certification which shows 19 respondents (15.2%), postgraduate of 83 respondents (67.2%) and 21 respondents (17.6%) undergraduate. The Status of respondents in the organization is also considered under descriptive analysis which consists of Educator/Lecturer which recorded 23 respondents (18.7%) and Students of 100 respondents (81.3%). The last demographical aspect for the research is respondents who have heard, having any knowledge, experienced or even involved in UROX. The first category which not advance about it shows 3 respondents (2.4%), Moderate advance at 18.5% for 23 respondents, Advance at 33.9% for 42 respondents and More advance of experience at 45.2% for 55 respondents.

| Question | Strongly Disagree | Five (5) Likert Scale | | | Strongly Agree | Mean Average |
|---|-------------------|-----------------------|---------|-----------|----------------|--------------|
| | 1 | 2 | 3 | 4 | 5 | |
| Section 1 : Course Content | | | | | | 4.65 |
| 1. You understand the learning outcomes of this course | 0 | 0 | 2 (1.6) | 43(35.0) | 78(63.4) | 4.6 |
| 2. The course content is well structured | 0 | 0 | 0 | 53 (43.1) | 70 (56.9) | 4.8 |
| 3. The course materials are sufficient | 0 | 0 | 0 | 60 (48.8) | 63(51.2) | 4.5 |
| 4. The course materials are up-to-date syllabus | 0 | 0 | 0 | 70 (56.9) | 53(43.1) | 4.7 |
| Section 2: Course Delivery and Learning Engagement | | | | | | 4.60 |
| 1. This course is well delivered every week | 0 | 0 | 4 (3.2) | 60 (48.8) | 59 (47.0) | 4.5 |
| 2. Lecturer uses an appropriate method to deliver his/her class | 0 | 0 | 1 (0.8) | 54 (43.9) | 68 (55.3) | 4.6 |
| 3. The language used to deliver course is appropriate | 0 | 0 | 6 (4.9) | 50 (40.7) | 67 (54.4) | 4.7 |
| 4. The lecturer provides a clear explanation when delivery the course | 0 | 0 | 2 (1.6) | 60 (48.8) | 61 (49.6) | 4.5 |
| Section 3: Course Assessment | | | | | | 4.62 |
| 1. The assignment(s) were briefly clearly to students | 0 | 0 | 6(4.9) | 50 (40.7) | 67 (54.4) | 4.5 |
| 2. Assignments are relevant to the course | 0 | 0 | 7 (5.7) | 48 (39.0) | 68 (55.3) | 4.7 |
| 3. Level of difficulty of the assignment (s) are reasonable | 0 | 0 | 8 (6.5) | 55 (44.7) | 60 (48.8) | 4.6 |
| 4. Term and conditions of assessment were clearly indicated. | 0 | 0 | 4 (3.2) | 44 (35.8) | 75 (61.0) | 4.8 |
| 5. I obtained timely feedback and the result on my assignments | 0 | 0 | 3 (2.4) | 80 (65.0) | 40 (32.6) | 4.6 |
| 6. The amount of assignments given is fair | 0 | 0 | 1 (0.8) | 90 (73.1) | 32 (26.1) | 4.5 |
| Section 4 : Student -Lecturer Interaction | | | | | | 4.52 |
| 1. The lecturer welcome opinion/ideas from students | 0 | 0 | 5 (4.1) | 60 (48.8) | 58 (47.1) | 4.5 |
| 2. The lecturer interacts with students through the learning activities | 0 | 0 | 0 | 90 (73.2) | 33 (26.8) | 4.6 |
| 3. The lecturer is attentive and provided sufficient support | 0 | 0 | 3 (2.4) | 67 (54.5) | 53 (43.1) | 4.4 |
| 4. The lecturer promotes interaction with my peers | 0 | 0 | 9 (7.3) | 57 (46.3) | 57 (46.4) | 4.5 |
| 5. The lecturer uses e-learning tools to interact in the classroom | 0 | 0 | 3 (2.4) | 80 (65.0) | 40 (32.6) | 4.6 |
| Section 5 : Lecturer Professionalism | | | | | | 4.54 |
| 1. The lecturer portrays professional ethics | 0 | 0 | 4 (3.2) | 67 (54.5) | 52 (42.3) | 4.5 |
| 2. The lecturer is knowledgeable in this course | 0 | 0 | 5 (4.1) | 78 (63.4) | 40 (32.5) | 4.6 |
| 3. The lecturer is on time as scheduled | 0 | 0 | 0 | 90 (73.2) | 33 (26.8) | 4.5 |
| 4. The lecturer treats class members fairly | 0 | 0 | 4 (3.2) | 65 (52.8) | 54 (44.0) | 4.6 |
| 5. The lecturer motivates me to learn this course | 0 | 0 | 1 (0.8) | 70 (57.0) | 52 (42.2) | 4.5 |

| Section 6: UROX | | | | | | 4.50 |
|--|---|---|---------|-----------|-----------|------|
| 1. Course card is properly managed by lecturer | 0 | 0 | 4 (3.3) | 54 (44.0) | 65 (52.8) | 4.5 |
| 2. Course card is up-to-date and communicated well to students | 0 | 0 | 0 | 98 (79.7) | 25 (20.3) | 4.5 |
| 3. Course card content is sufficient | 0 | 0 | 5 (4.1) | 66 (53.7) | 52 (42.2) | 4.5 |
| 4. Course card content is resourceful | 0 | 0 | 2 (2.6) | 54 (44.0) | 67 (54.4) | 4.5 |
| 5. UROX is easy to use and supports my study | 0 | 0 | 4 (3.2) | 60 (48.8) | 59 (48.0) | 4.5 |

Table 6: The summary of Research Findings

Note : (%) in percentage

Source : Research Findings (2025)

The overall findings of result show in Table 6 above that the mean average of construct 1 : Course Content is 4.65; Construct 2 : Course Delivery & Learning Engagement is 4.60; Construct 3 : Course Assessment is 4.62; Construct 4 : Student-Lecturer Interaction is 4.52; Construct 5 : Lecturer Professionalism is 4.54 and Construct 6: UROX is 4.50. In construct 1: Majorities of respondents show high mean score with 4.8 that the structure content is well structured and mean score 4.7 for the course materials are up-to-date syllabus. In construct 2: Majorities of respondents show high mean score with 4.7 that the language used to deliver course by lecturer is appropriate and mean score 4.6 for the lecturer uses an appropriate method to deliver his/her class. In construct 3: Majorities of respondents show high mean score with 4.8 that the term and conditions of assessment were clearly indicated and mean score 4.67 for the assignments are relevant to the course. In construct 4: Majorities of respondents show high mean score with 4.6 that the lecturer interacts with students through the learning activities and mean score 4.6 for the lecturer uses e-learning tools to interact in the classroom. In construct 5 : Majorities of respondents show high mean score with 4.6 that the lecturer is knowledgeable in this course and mean score 4.6 for the lecturer treats class members fairly. Lastly, In construct 6: Majorities of respondents show high mean score with 4.6 fairly for all elements.

5.0. CONCLUSION

In conclusion which choosing the right platform is essential for the success and sustainability of any pedagogical device. It is crucial to select a platform that aligns with the philosophy of free platforms and their dynamic community. This approach aims to simplify the selection process and ensure the best fit for an institution's specific objectives and requirements. It is important to highlight that institutions have the freedom to select and prioritize the characteristics and sub-characteristics that best suit their unique needs, technical requirements, and functional and organizational expectations. This flexibility allows for a tailored choice that aligns perfectly with the institution's vision and goals.

The introductory information behind these LMS software are indeed advance of their technology-based programming wherein students can be monitored, interact, and at the same time evaluate their progress. Whereas LMS programs will ensure academic integrations will be more accurate and store reliable result findings unbiased. Practically speaking, Teachers are not worried on how the LMS programs computes and do it's random learning evaluations because any LMS medium can do any hands-on working capabilities, assured teaching assessments, and resolves learning developmental issues of the students thoroughly. While presenting examples of data derived from an institution-wide LMS, they underscored the challenge of readily and learn accurately interpreting data and translating findings to practice.

Learning Management Systems (LMS) development processes builds menus with several programming languages, this work is complicated, and the failure rate is high. During the ongoing phase, the evaluation and revision process is conducted also, to improve the quality and function of the LMS. The main thing to consider is that LMS does improve the quality of learning, & LMS can be implemented continuously, and its features can even be developed further. Through LMS, prospective educators can see the performance of their teaching then do self-reflection. The Learning Management System (LMS) usage that are mentioned above, and the E-Learning developmental strategies of educators towards the students, will be reflected on these descriptive viability result findings: a.) LMS Systems' Quality; b.) E-Learning Developmental Quality; c.) Online Learning Engagements; d.) Different Users' LMS Satisfactions; and e.) and the Leaners' Continuous LMS usage.

Having classes and courses conducted using an LMS provides an opportunity to collect data that are otherwise difficult to gather in a classroom. Reports can be generated from this information to provide you with insights. The following reporting features should be natively available in an LMS. In conclusion, Learning Management System (LMS) can play a crucial role in educators education by providing a platform for lecturers to access and create educational resources, manage their courses and interact with their students. By using LMS, lecturers can also engage in ongoing professional development and collaborative learning with their peers. The use of LMS in educator education can help to promote better learning outcomes, enhance lecturer effectiveness, and improve the overall quality of education. Teachers can use LMS to create and share lesson plans, quizzes, and other educational resources with their students, and track their progress. Moreover, LMS can also facilitate communication between educators, students, and administrators, which can lead to a more effective and efficient learning environment. Educators can use LMS to provide feedback to their students, monitor their progress, and identify areas for improvement.

This study can open up avenues for further investigation. For future research, it is suggested to determine whether there is a correlation between factors that might influence the intention to use UROX such as specific features, user experiences, and pedagogical implications.. The outcomes of this research could be disseminated to interested parties and educators in order for them to overcome the various challenges of online learning methodology. Other than that, the current study is restricted to only single LMS platforms. In order for educators to optimize the teaching and learning process, it would be prudent to conduct additional research on the variety of other learning management systems, particularly those that are relatively new.

Overall, LMS can be a valuable tool for educator education, providing a platform for ongoing learning and professional development, and enhancing the effectiveness of teaching and learning. Its role in educator education is becoming increasingly important as technology continues to advance and education moves towards a more digital and blended learning environment. LMS can be a powerful tool in lecturer education, helping educators to manage courses more efficiently, facilitate communication and collaboration, assess student learning, personalize learning, and use data analytics to improve their teaching strategies.

6.0. RECOMMENDATIONS

a) Recommendations to the study

There are many issues and challenges faced by the teams that developed the UROX and as well as still developing it. At the early stage, developing UROX was the biggest challenge faced, but after a few years of operation, the biggest challenge was to fulfill the needs of nearly 70, 000 users all over Malaysia as well as some international students, namely from our international collaborators with other ODL University. Based on the UROX utilization that there is clear indication that UNIRAZAK needs a very stable infrastructure in order to meet users' need. It is a challenge in making sure the infrastructure (hardware and software) to be available all the time.

As the UROX users are ranging from fresh school leavers to full time working adults, the time and duration of accessing UROX is greatly varied. Some users prefer to access UROX during daytime, while many others will only get the chance during night time. It is such a big responsibility to provide 100% accessible services at any time in this situation. Fortunately, with proper design of the infrastructure, the up-time for UROX is 99.9%.

Since not all our learners can afford to subscribe to high speed internet access, it is also crucial to make sure that the time taken for downloading and uploading of homepage is as low as possible. For UROX, the downloading of the page takes around 15 seconds with a 56Kbps connection. Uploading of pages takes approximately 10 seconds. Realizing the importance of complying to standards, OUM has taken an active step to make UROX comply to standards like Sharable Content Object Reference Model (SCORM). As for the moment, UROX is fully complying with the SCORM standard to ensure the orderly delivery of e-contents and address any costly inefficiency. UROX webpage is also developed to comply with the World Wide Web Consortium (W3C) standard.

b) Recommendations to the future researchers

At UNIRAZAK, the practice of constantly improving the quality of teaching and learning always remains as the top priority. UROX does play a big role in the process of teaching and learning, there are several key areas where there is a need for UNIRAZAK to look into, and to make sure that certain changes in technology and pedagogy be adapted to UROX, so as to ensure its effectiveness as a major e-learning tool. Some of the areas which need to be incorporated in the future generation of UROX are discussed below:

1. Plagiarism has become one of the main concerns among educational institution. With the advent of technology and the high availability of Internet, plagiarism can easily be done by learners. A feature to detect plagiarism needs to be included in the next generation of UROX. The feature will not only detect plagiarism in learners' assignments submitted via online, but also amongst the learning materials created by the instructor.
2. The element of artificial intelligence (AI) needs to be incorporated in UROX. One example would be by having an agent that provides guides to users in using UROX. More importantly, this agent also guides users on how to do certain learning activities, and offer online support wherever necessary.
3. The other element of AI that needs to be incorporated in UROX is the ability of delivering learning materials and learning activities based on learners' learning styles and pace. This will help the learners to follow lessons based on his/her capability, thus will create a more productive learning.
4. Security needs to be upgraded to make sure that all confidential information can be accessed and used by authorized party only. Since the UROX is rich with complete data about learners' personal particulars, exam results, financial details and many other confidential data, UROX must add the feature on Security Authentication and Encryption.
5. According to IT specialize that UROX available in the market from 2008 to 2015, will be an open architecture LMS and so, there will be a need to integrated LMS with enterprise application suite.

REFERENCES

- [1] Arshad, Muhammad & Al Mufarreah, Ahmad & Noaman, Khaled & Saeed, Muhammad. (2020). Academic Semester Activities by LMS during COVID-19 Pandemic: A Case of Jazan University. 11. 213-219.
- [2] Alias, N.A. and Zainuddin, A.M. (2005). Innovation for Better Teaching and Learning: Adopting the Learning Management System. *Malaysian Online Journal of Instructional Technology*, 2, 27-40
- [3] Bansal, Dr Sonia Kaur, Sharma Nikita (2021) Ilkogretim Online. 2021, Vol. 20 Issue 5, p1445-1449. 5p. Kaur Bansal, Dr. (2021) A Study of Decision Making of Teacher Educators. 10.37896/aj9.4/059.
- [4] Bansal, Dr Sonia Kaur & Singh, Ajaydeep (2022), A Study of Stress Related to Mental Health Among m.ed. Trainees During Pandemic. *SDES- International Journal of Interdisciplinary Research*. 3. 473-475. 10.47997/SDES-IJIR/3.5.2022.473-475.
- [5] Bansal, Dr Sonia Kaur & Mahawar, Khamchand (2022), Awareness of LMS on Training of bed. Students During Pandemic. *SDES-International Journal of Interdisciplinary Research*. 3. 493-496. 10.47997/sSDES- IJIR/3.5.2022.493-496.
- [6] Chaturvedi, Veenu & Bansal, dr.Sonia Kaur & Sharma Rajesh Kumar (2020), Significant of Experimental Research in Educational Technology : A Review Study, *Adalya Journal* Volume 9, Issue 4, April 2020 issn no:1301-2746 <http://adalyajournal.com/> <https://doi.org/10.37896/aj9.4/066>
- [7] Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319. <https://doi.org/10.2307/249008>
- [8] Kaur Bansal, Dr. (2021) Dealing with Job Burnout in Higher Education. 20. 2083-2087. 10.17051/ilkonline.2021.04.237.
- [9] Khoa, B. T., Ha, N. M., Nguyen, T. V. H., & Bich, N. H. (2020). Lecturers' adoption to use the online Learning Management System (LMS): Empirical evidence from TAM2 model for Vietnam. *Ho Chi Minh City Open University Journal of Science-Economics and Business Administration*, 10(1), 3-17.
- [10] Gary Sykes, Tom Bird, and Mary Kennedy (2010), *Teacher Education : Its Problems and Some Prospect*, Volume 61, Issue 5 <https://doi.org/10.1177/0022487110375804>
- [11] Marilyn Cochran-Smith (2005), *The New Teacher Education: For Better or For Worse* Volume 34, Issue 7 <https://doi.org/10.3102/0013189X034007003>
- [12] Meena Kusum Lata (2022), A Study on the Problem Faced by School Teacher in Shifting to Online Teaching Mode of Education, Volume 10, Issue 4, Aug-September 2022 pioneer research & development group (www.prdg.org)
- [13] Ouadoud, M., Chkouri, M. Y., Nejjari, A., & El Kadiri, K. E. (2017). Exploring a recommendation system of free e-learning platforms: functional architecture of the system. *International Journal of Emerging Technologies in Learning (Online)*, 12(2), 219.
- [14] Prahani, B. K., Alfin, J., Fuad, A. Z., Saphira, H. V., Hariyono, E., & Suprpto, N. (2022). Learning management system (LMS) research during 1991-2021: How technology affects education. *International Journal of Emerging Technologies in Learning (Online)*, (17), 28.
- [15] Sharma, Avdhesh Kumar & Singh, Dr. Roma & Chopra, Dr. Rajani & Bansal, Dr.Sonia Kaur (2022). A study of parent's opinions in context of the effects of online teaching-learning on learning at Primary level in Jaipur. 2. 35-44
- [16] Thuseethan, S., Achchuthan, S., & Kuhanesan, S. (2014). Usability evaluation of learning management systems in Sri Lankan universities. *Global Journal of Computer Science and Technology*, 15(1), 15-25. arXiv preprint [arXiv:1412.0197](https://arxiv.org/abs/1412.0197).