Level of Capabilities of MOL Magsaysay Maritime Academy Faculty in Using Learning Management System

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ARTICLE INFO	ABSTRACT
	The study was conducted to assess the level of capabilities of MOL Magsaysay Maritime Academy faculty members in using Learning Management System (LMS) with the end view of capacitating them in the use of such. Originally, a total of 35 questionnaires were sent through google form; however, only 18 or 51% despite constant follow-up of the researchers. Interview was also conducted to 10 faculty members to validate the data taken in the questionnaire. The study found that the teachers have high level of capability in using LMS. However, the researchers still proposed the following to significantly enhance the teachers' skills in using LMS to the fullest– tutorial, peer mentoring, demonstration, and workshops. Likewise, the researchers recommend the academy, as well as other institutions, to embrace technological changes by cultivating a culture of <u>pedagogical</u> hybridization.

1. Introduction.

Hybridization of educational program is the latest approach most academic institutions currently utilize. This approach combines traditional lecture-based instruction and flexible learning approaches to address the pressing issues brought about by the COVID 19 crisis. The pandemic paved way the conditions, structures, and delivery of teaching and learning, resulting to changes in the pedagogical landscape. Most learning institutions shifted to a new modality to cater the urgent necessity to continue education despite of the current situations. Due to the strict regulations set by international, national, and local government around the globe to lower contamination of the virus, face- to- face instruction was put into suspended animation. With this predicament, schools in various parts of the world employed technological approaches to reach out learners and to later change the conventional construct that has reigned since the dawn of the intellectual revolution.

The rise of eLearning is the solution most schools run into, defined as a learning environment provided to students or anybody through electronic media (Vishwanatan, 2021). Many schools employed learning management system (LMS), which Aswini (2019) opened as one of the best investments an organization may have to train employees, update knowledge, and stay compliant with educational authority because it is important to take note the importance of creating a learning environment where skills and challenges are in dynamic balance (Sakura,2012).

Learning management system is an online software for the administration, documentation, and creation of educational courses, activities, and outcomes. It provides tools and functions like course management tools, online group chats and discussions, documents (lecture materials, homework and assignment etc.), power points, video clips uploading, grading, and course evaluation to support teaching and learning (Aswini, 2019; Freire, Arezes, Campos, Jacobs, & Soares, 2012). This notion is supported by Jung & Huh (2019) who stated that LMS has multiple online operations and behaves as framework to capture numerous layers of progressive learning. Hence, the use of LMS could have a great impact among students across all levels.

In addition, Gautreau as cited in Strakos (2023) noted that an LMS may be defined as a self-contained webpage with embedded instructional tools that permit faculty to organize academic content and engage students in their study. Likewise,

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Fathema, Shannon, & Ross (2015) pointed out that LMS provides a virtual way of faster communication among students and teachers, and offer speed and effectiveness in educational processes. In essence, LMS helps instructors to deliver and manage synchronous and asynchronous online teaching. It maintains the integrity of the educational program by enabling educators to develop courses, deliver instructions, facilitate communication, collaborate effectively and efficiently between students, and provide other learning techniques (Aswini, 2023). Students can learn whenever they are and wherever they may be, a perfect fit to the problem at hand. Conversely, it is not as perfect at it may seem. During the first few years of its implementation, obstacles were encountered like unavailability of the required infrastructure (ICT- enabled classrooms), poor internet connectivity, and lack of training and motivation in using the ICT tools on the part of both teachers and students in the effective use of ICT (Ghodke, 2021). To cope with the pressing barriers of online delivery, Aswini (2023) noted that a proficient team must be created. There should be support coming from the top management on-board and stakeholders. In terms of delivery, a well equip key players must be trained composed of a team leader, project manager, eLearning specialist, and L&D administration. And since MMMA was founded only in 2018, it is only in its infancy stage; therefore, there is a need to assess how LMS is used by teachers. In addition to this, since it is a Maritime school, teachers of technical courses may not have enough knowledge on how to carry teaching and learning practices inside the classroom.

In line with this idea, this study focused on the initial inquiry on the level of competencies of online instructors of MMMA in using LMS. Being the front runner in the delivery of content, skills, and other learning objectives inside the classroom, they must be properly equipped with the know-how of using this new modality. Training and updating one's skills and technology is necessary in this everchanging world where there is an influx of development and innovations because, according to Downes & Bishop (2015), continual LMS technology resource changes and refinement can impact the implementation of pedagogical changes to support students in online settings. According to a report from Ndegeya (2019), Moodle (Modular Object-oriented Dynamic Learning Environment) is the most common learning management system in the world. Of 78% of organizations who reported using LMS, 33% of them had requirement to replace and upgrade to the new version technology (Akbar et al., 2019; Nguyen 2019,2020; Nguyen & Tran.2015). Apparently, LMS has been part of the online learning modality implemented in schools in the new normal education. Then, the significant role played by online educators as one key element in the success of blended or flexible learning cannot be denied. While it has been mentioned that MMMA is still in its infancy stage, the findings of the above-mentioned literatures somehow helped the researchers in the conduct of the study. Some of the dynamic activities made by teachers in the use of LMS are as follow: First, online instructors can encourage learners to make connections from the classroom to the real world (Kimmons et al., 2010; Downes & Bishop, 2015; Wenglinsky, 1998). Barth-Cohen et al. (2016) believe that instructors who foster online

discussions among learners can allow learners to construct and adapt their interpretations of concepts. Online instructors also showcase fundamental skills in solving dilemmas, collaboration, metacognition, and literacy in ICT (Al-Fraiht et al., 2020; Kimmons et al., 2019; Pasztor, Molnar, & Csapo,2015). Lastly, the use of LMS by instructor can communicate precise expectations to students by monitoring student progress and evaluate current levels of accomplishment and attainment (Branch, 2015; Watson & Watson, 2012). For the past years, various studies have been conducted to assess the efficiency and effectivity of LMS in the delivery of knowledge, skills, and other competencies based on appropriate curriculum standard. The impact brought about by LMS is further elaborated by Dash (2019), who said that, through the utilization of this software, there are better access to learning material and supplementary teaching resources, immediate feedback, and learning outside of class environment. However, most of the studies conducted are toward assessing the impact of LMS to its end beneficiaries who are students. Currently, there is a shortage of investigation to mitigate the effect of online instructors to the overall success of online learning that is why this study was conducted.

1.1. Statement of the Problem.

This research was conducted to assess the level of capabilities of MMMA teachers in using Learning Management System.

Specifically, it tried to answer the following questions.

1. What is the teachers' level of capabilities in using LMS?
2. What problems do the teachers encounter in using LMS.
3. What recommendation could be provided to enhance the teachers' level of capabilities in using LMS?

2. Methodology.

This part contains the research method, respondents of the study, instruments used, sampling technique, data gathering procedure, and statistical treatment of data.

2.1. Research Design.

Descriptive method was used in the study. Descriptive method is used to obtain information concerning the current status of a phenomena to describe "what exists" and "what is happening" with respect to variables or conditions in a situation. The goal of the descriptive research is to describe the variables needed. Its advantage is to provide a relatively complete picture of what is occurring at a given time. It allows the development of questions for further study. Hence, it is the most applicable method to be used as the study assessed the level of capabilities of MMMA teachers in using LMS.

2.2. Samples and Sampling Technique.

The study utilized purposive sampling, a non-probability sampling technique in which units are selected because they have the characteristics that are needed in the study. The main

criterion that was used is that the faculty must have been teaching in the Academy for at least 1 year; hence, newly hired teachers were not taken as respondents. Since there were only few faculty members during the conduct of the study, complete enumeration technique was used and intended to involve 35 instructors. However, only 18 responded on the online survey. And for the interview, out of those who responded only 10 faculty members were involved.

2.3. Instruments Used.

The study utilized self-made questionnaire in the gathering of data. Likewise, interview was conducted to validate the data taken through questionnaire. The self-made and interview guide questions were validated by the research director of MMMA.

2.4. Data Gathering Procedure.

The researchers sent a letter of consent to the faculty members to inform and seek their approval to take part in the study. Forty faculty members were given link to their respective emails, as well as verbal reminder to check and answer the survey. However, only 18 teachers responded on the survey. The results of the online survey were treated by a Mathematics teacher.

To re-examine the teachers' assessment on their level of using the LMS, a personal interview was scheduled and executed on the convenience of the 10 interviewees since most of them had classes during that semester. The raw data were transcribed in verbatim manner.

3. Result and Discussions.

This part contains the results and discussions of the problems raised in the Statement of the Problem.

3.1. What is the teachers' level of capability in using Learning Management System?

After the data in the questionnaire had been collected, they were tabulated and treated through the calculation of the mean. Hence, Table 1 shows the level of capabilities of faculty members in using Learning Management System. Out of 65 indicators, 14 statements received a means ranging from 4.25 to 4.81, interpreted as Excellent; 31 received a means of 4.12 to 4.19, interpreted as Very Good; 17 got a means of 2.81 to 3.38, interpreted as Good; and three (3) had a means of 2.44 to 2.56, interpreted as Fair. With an overall mean of 3.68, it shows that the faculty members have a very high level of capabilities in using Learning Management System (LMS). It must be noted that MOL Magsaysay Maritime Academy is a maritime school; hence, majority of its faculty members are graduates of maritime education - Bachelor of Science in Marine Engineering and Bachelor of Science in Marine Transportation. In fact, out 35 teaching force, 27 are technical professors teaching maritime courses while only 8 are general education professors handling general education subjects. Most of these technical professors are in their 50's where some of them are already in their senior

age who have retired from being seafarers. Therefore, it is expected that they are not that expert in the use of technology in the classroom as compared to general education teachers who have been utilizing computer-based instruction throughout their career as educators; hence, an excellent rating was not achieved. With basic knowledge in technology, technical professors learn to use LMS only through the training and seminars provided by the Academy and through peer mentoring. Younger faculty members mentor those who are not that adept in using technology in the classroom. To wit, one of the faculty interviewees mentioned,

With it comes to the use of LMS in the classroom, I can say that I already know a lot, especially the basic ones. As we all know, the Academy provides us trainings and seminars, which helps us a lot upgrade our capabilities. However, I still need to learn more. Good, my co-teachers are very accommodating. Whenever, I encounter a problem, I approach them and they are very accommodating. We do peer mentoring.

Another teacher in the interview verbalized,

I am thankful that the Academy is very supportive when it comes to upgrading our teaching competence, especially in the use of technology in the in the classroom. I remember that before we implemented the digital face-to-face platform sometime during the first trimester of School Year 2020-2021, we had a one-week training in the use of LMS. I think the training was facilitated by one of the teachers from De La Salle University-Dasmarinas. As of now, whenever I encounter a problem in relation to the use of LMS, I ask assistance from my co-teachers who are more than willing to help me.

Out of the 65 indicators, statement 30, how to log in the LMS, got the highest mean of 4.81. Though it is the most fundamental in the use of LMS, the score suggests that there still faculty members who have a hard time logging in. On the other hand, statements 29, 60, and 64, knowing how to use the blogs, knowing how to use the review, and knowing how to use catalog, received the lowest means of 2.44, 2.56, and 2.56, respectively. These three (3) indicators got such scores because these are already high features of the LMS. In addition to that, these applications are seldom used in the classroom; hence, teachers do not receive mastery of such features.

Teachers play an important role in carrying out any innovation in the classroom (Alharbi & Drew as cited by Fearnly & Amora, 2020). This is why determining the variables that motivate teachers to provide technology-supported learning environments to their students is essential, especially since the face-to-face platform becomes limited due to the outbreak of Covid-19 pandemic. And one of these is the use of Learning Management System (LMS). It is a web-based application capable of transforming face-to-face sessions by offering students a space for online learning. It is a platform that offers a variety of integrated tools for delivering and managing online instruction to students by offering 24/7 access to course content while enabling convenient course creation and management for teachers (Bousbahi & Alrazgan as cited by Fearnly &

Table 1: Level of capabilities in using various features in Learning Management System.

	Indicators	Mean	VI		Indicators	Mean	VI
1	I know how to create modules	4.50	E	34	I know how sync lesson from parent to child.	4.00	VG
2	I know how to hide lessons/ modules	4.13	VG	35	I know how to upload syllabus.	4.38	E
3	I know how to unhide/edit lesson or modules.	4.06	VG	36	I know how to import existing and previous courses	3.44	VG
4	I know how to group students by Teams.	3.69	VG	37	I know how to export existing and previous courses	3.88	G
5	I know how to use gamification.	2.81	G	38	I know how to check students' attendance	4.38	E
6	I know how to make assignments.	4.50	E	39	I know how edit/configure students' attendance.	4.31	E
7	I know how to check assessments/assignments.	4.44	E	40	I know how to edit profile.	4.25	E
8	I know how to make quiz.	4.44	E	41	I know how to use the calendar to schedule my classes.	3.94	VG
9	I know how to make an exam	4.44	E	42	I know how to enroll my students	4.19	VG
10	I know how to schedule quiz and exam.	4.44	E	43	I know how to unenroll my students	4.19	VG
11	I know how to export gradebook.	3.94	VG	44	I know how to configure the setting of LMS	3.75	VG
12	I know how to import gradebook.	3.50	VG	45	I know how to use the add icon/navigation.	2.63	G
13	I know how to export gradebook to excel file.	3.94	VG	46	I know how to use the remove icon/navigation.	2.88	G
14	I know how to export gradebook to CVS file.	3.31	G	47	I know how to use the edit icon/navigation.	2.88	G
15	I know how to export QTI.	3.38	G	48	I know how to use the configure icon/navigation.	2.94	G
16	I know how to import QTI.	3.44	VG	49	I know how to use the delete icon/navigation	2.88	G
17	I know how to make a true or false type of quiz/assignment.	4.31	E	50	I know how to use the notification icon/navigation.	3.19	G
18	I know how to make a multiple-choice type of quiz/assignment.	4.13	VG	51	I know how to use the NEO help center icon/navigation.	3.38	G
19	I know how to make many choices type of quiz	4.44	E	52	I know how to use the trash icon/navigation.	3.56	VG
20	I know how to make a fill in the blank type of quiz/assignment.	4.19	VG	53	I know how to deactivate a course/module	3.50	VG
21	I know how to make a freeform type of quiz/assignment.	3.94	VG	54	I know how to use the message icon/navigation.	3.69	VG
22	I know how to make a matching type of quiz/assignment.	3.69	VG	55	I know how to use the teacher's view icon/navigation.	3.88	VG
23	I know how to make a hotspot type of quiz/assignment.	3.44	VG	56	I know how to use the student's view icon/navigation	3.75	VG
24	I know how to make a dropbox type of quiz/assignment.	3.00	G	57	I know how to use the newsfeed.	3.88	VG
25	I know how to make an arithmetic type of quiz/assignment.	3.19	VG	58	I know how to use the automation.	2.63	G
26	I know how to schedule/set up live conference.	3.38	G	59	I know how to use the wiki.	2.88	G
27	I know how to use MS Teams in live conference.	3.75	VG	60	I know how to use the review.	2.56	F
28	I know how to use the chat.	4.19	VG	61	I know how to use the administrator.	3.19	VG
29	I know how to use the blogs.	2.44	F	62	I know how to use the resources.	3.31	G
30	I know how to login in LMS.	4.31	E	63	I know how to use the library features	3.06	G
31	I know how to change/reset my password	4.19	VG	64	I know how to use the catalog.	2.56	F
32	I know how create courses of my students	4.44	E	65	I know how to join group using access code	3.50	VG
33	I know how create parent and child courses.	4.00	VG		Overall Mean	3.68	Very High

Legend: VI- Verbal interpretation, E- Excellent, VG- Very Good, G- Good, F-Fair.

Amora 2020). The use of LMS to aid in educational initiatives has become widespread among colleges and universities over the years. Higher education institutions use them to supplement face-to-face learning sessions, as well as support blended instruction and distance learning (Klobas & McGill, as cited in Fearnly & Amora, 2020). Their significant contribution to instructional delivery notwithstanding financial investment and technical demands cannot be overweighed.

However, despite the perceived benefits of using LMS, many teachers remain hesitant to adopt it as a teaching tool. Moreover, teachers tend to underutilize this educational technology despite its widespread availability in higher education settings. The variables that affect faculty adoption of the technology include teachers' perceptions, self- efficacy beliefs and instructional goals, as well as availability of resources, support services, and time (Baturay et al., 2017; Siyam, 2019). With a LMS, an instructor can create online course content and subsequently manage that course to enhance critical thinking abilities and promote collaboration among university students (Zanjani, Edawards, Nykvist, & Geva, 2016). LMS offers many tools such as online group chats, discussion threads, video conferencing, lecture materials, learning modules, grading and course evaluations, all of which may be customized to suit specific instructional needs. According to Anshari, Almunawar, Shahrill, Wicaksono, & Huda (2017), non-traditional forms of learning supported by online approaches to instruction positively affect both teachers and learners.

Some of the benefits provided by LMS include centralized learning. An LMS provides a centralized platform for managing and delivering training content, making it easy for teachers and students to access the resources they need, and for administrators to manage course materials and track learner progress. Implementing an LMS can help school administrators reduce training costs by eliminating the need for printed materials, venue rentals, and instructor fees associated with traditional face-to-face training. Additionally, it allows for easy updating and modification of training content, reducing the costs of ongoing maintenance. It is also cost efficient as LMS software enables both teachers and students to learn at their own pace, from anywhere and at any time, reducing the time spent on scheduling and coordinating in-person training sessions. This flexibility allows teachers to engage in training activities without disrupting their regular work schedules. LMS ensures that all teachers receive consistent and standardized training, regardless of their location or job role. This helps maintain a high level of quality and compliance across the institutions. LMS software, likewise, allows for personalized learning paths and content recommendations, ensuring that teachers focus on the most relevant and impactful training for their needs. This tailored approach can lead to better engagement and improved learning outcomes. In addition to that, by providing teachers with the necessary skills and knowledge, LMS software can lead to improved job performance and increased productivity. Well-trained teachers are more likely to feel confident in their

abilities, leading to higher levels of job satisfaction and retention. And finally, implementing an LMS can help promote a culture of continuous learning and development within the organization. This fosters a growth mindset among teachers, encouraging them to seek out new opportunities for professional growth and skill development.

In relation to the foregoing discussions, You as cited in Bradley (2021) conducted a study using an LMS to find observable approaches to course learning attainment. The study included specifications for gathering information on self-controlled knowledge with LMS specifications and learner attainment. There were 530 college students as respondents taking an online course. The study found essential resources to use in class such as assignments, syllabi, schedules, tips, discussion forums, relevant links, and support from the instructor. The study, likewise, found learners' rates of universal application, login sessions, delay, frequency, and checklists to make sure students are reading and reviewing information packets, which also helps predict student course outcome. The study also collected data that included students' monitoring and self-regulating their course learning and found that students who kept track of their online assignments by continually logging into the online course and reading materials frequently performed well. This result reveals the benefits of self-attained knowledge and the ability to front-load specifications to support student attainment. Although data logged by an LMS could support a progression of indicators, there is no guarantee it could increase the probability of the student's achievement (You as cited in Bradley, 2021). Thus, professionals and administrators in academe should continue to analyze LMS resources that could accurately capture online student engagement and strategies that support learners in their ability to self-regulate.

3.2. What problems do teachers encounter in the use of LMS?.

Emerging technologies in education drive colleges and universities to progressively infuse their use in higher education (Bermúdez-Hernández et al., 2017). Given their undeniable importance, instructors are challenged to incorporate them as a means to complement conventional learning environments, enhance learners' experiences, and improve academic outcomes (Parkman, Litz, & Gromik, 2018). And one of these emerging technologies is learning management system (LMS), a web-based application capable of transforming face-to-face sessions by offering students a space for online learning (Wichadee, 2015). Using a LMS is an effective way of delivering instruction to students by offering 24/7 access to course content while enabling convenient course creation and management for teachers. But despite the perceived benefits of using LMSs, many teachers still remain hesitant to adopt them as a teaching tool (Zanjani et al., 2016). They tend to underutilize this educational technology despite its widespread availability in higher education settings. The variables that affect teacher adoption of the technology include teachers' perceptions, self-efficacy beliefs, and instructional goals, as well as availability of resources, support services, and time (Siyam, 2019). In addition to this, Snoussi (2019) studied the challenges that universities face regarding the adoption of learning management system in

four private universities in the UAE. Face-to-face and online interviews were held with 54 participants, including deans, HoDs (Heads of Departments), and program directors of the universities. She found that lack of students' self-discipline in online systems, inconsistency of learning management systems with some academic programs, and technical literacy are the basic challenges that universities face in the use of learning management systems.

While the present study yielded an over-all weighted mean of 3.68 in the survey questionnaire, showing that MMMA's teachers have very high level of capabilities in using LMS, there are still some areas where teachers need to be upgraded based on the result of the face-to-face interview. To wit, one of the teachers mentioned,

I know how to use almost all the important features of the LMS. However, there are still some areas that I need to explore or that I need to have assistance such as in adding, removing, editing, and configuring icon navigation. In this case, I ask assistance from my co-teachers, especially from the younger ones who are more techie than me.

Likewise, another faculty member verbalized in the interview,

As to the use of LMS in the classroom, I can say that I am already knowledgeable about it although I there are s till areas that I need to upgrade more. I need to explore more in using gamification, in export exporting gradebook to CVS file, and in exporting and importing QTI.

These results taken in the interview validate the results taken in the questionnaire as these items received only **good** ratings. It must also be noted that there were 3 indicators that received **fair** ratings in the questionnaires. These pertain to using the blogs, using the review, and using the catalog, with weighted means of 2.44, 2.56, and 2.56, respectively. Likewise, this result was also supported by the data taken thru interview as one of the teachers verbalized,

Like some teachers who sometimes struggle in the use of LMS, I myself also encounter some problems especially so that we are already at this age compared to the younger ones. But here, as you know, the Academy gives us trainings and seminars to enhance our knowledge in the use of technology in the classroom, especially the LMS, which is the platform that we use. I also have problem in using blogs, review, and catalog. But I ask assistance from my co-teachers or even from students. While the result of the interview showed some areas that teachers need to explore, there are a lot of areas where teachers already excel.

Out of 65 indicators, 14 received excellent ratings while 31 received very good verbal interpretations. On top of these are logging-in, creating lessons and modules, making assignments, checking assignments, and creating course, with weighted means of 4.81, 4.50, 4.50, 4.44, and 4.44, respectively. There is no wonder why these items got the highest means as they are the

basic or fundamental in using LMS. One, whether teacher or student, cannot use LMS without first logging-in his account. Teachers also have to create classes so that students can enroll. In the case of the Academy, it is the teachers who enroll the students. After which, teachers have to upload the lessons or modules for discussion.

While Siyam (2019) mentioned variables that affect teacher adoption of the technology, such teachers' perceptions, self-efficacy beliefs, and instructional goals, as well as availability of resources, support services, and time, the results of the present study negate what Siyam had mentioned as the former study did not find any of those. While the present study was conducted during the school year 2021-2022, the Academy was only in its 4th year of operation as it started its operation in August 2018. With that, its computer-related facilities and equipment such as computer units installed in the Electronic Resource Center (library), faculty room, and classrooms are still in good condition and are functioning properly. The ERS has 70 computer units installed while each of the faculty members is provided 1 computer unit each. The Ship-In-Campus, likewise, has 250 units that are used during major examinations such as Midterms and Finals. The Information Technology Center (ITC) is manned by an IT supervisor, a system analyst, and 2 IT officers considering that the Academy caters to more or less 900 students only. The teachers also warmly welcome the adoption of LMS as they strongly believe in the benefits provided by technology in the classrooms, both to them and to students. However, teachers sometimes encounter internet connection problem. One teacher in the interview noted, *I don't experience big problem in my use of LMS except that, in some instances, we encounter internet disconnection, but I think it is not only within the campus but within the whole area within the vicinity of the Academy.*

This result is supported by what Ferri, Grifoni, & Guzzo (2020) and Dhawan (2020) said that even though using LMS is said to be a 'panacea' in the new normal era because it is more flexible and effective, not all lecturers and students can immediately adapt to the implementation of an online learning system. The respondents of their study experienced various challenges, low interest, and specific problems that hampered the learning process. Likewise, according to the findings by Ningtyas (2022), LMS was the most widely used online application at (Institut Agama Islam Negeri) IAIN Metro during the pandemic because it was considered effective in helping students during the distance-learning process. Furthermore, Bustomi, Zuhairi, & IImudinulloh (2021) explained in their findings that the LMS was used to support the needs of learning media at IAIN Metro; however, the respondents experienced several obstacles, such as poor Internet network connections, low student learning focus, and low lecturer competence. Thus, they recommended that further research related to the phenomenon of using LMS is needed.

3.3. *What recommendations can be solicited from the teachers to enhance their capability in the use of LMS?.*

While a lot of studies have been conducted about the benefits of using LMS in educational settings, a number of research

have also been carried out to study the challenges encountered in the use of LMS in academe. Finding the challenges that hinder the proper adoption of LMS in the classroom, a number of studies have suggested some recommendation to combat them. One of which was conducted by Mohammadi, Mohhibi, & Hedayati (2020), which investigated the challenges and factors influencing the use of learning management system during the Covid-19 pandemic in Afghanistan. The result of the analysis of the gathered data showed that factors affecting the use of LMS among the teachers are grouped into skills, infrastructure, LMS quality, performance expectancy, and economic categories. The researchers' level of knowledge and experience with the use of LMS and developing e-content is one of the key factors having a significant impact on the use of LMS. Some respondents also stated that lack of knowledge and experience with the internet and computer critically influenced their desire to use LMS. Access to consistent internet and electricity are the other major factors representing the infrastructural issues among the university teachers. Besides, teachers are also concerned about the availability, usability, accessibility, and functionality of the LMS, which are expressed as important issues in the LMS. To illustrate, the teachers expressed issues such that the LMS is not easy to use, lacks some required functions, and is not accessible on low internet bandwidth. They also complained about the system downtime during some periods. The level of perception in efficiency and productivity of teaching using LMS and the potential outcome of the system is described as low, which indicates the fact that they do not expect the use of Higher Education Learning Management System (HELMS) will be advantageous in terms of teaching. Economic issues are less of concern from the teachers' perspective. However, it is a major issue that internet users in Afghanistan still face. In conclusion, major factors that are found to influence the use of LMS among teachers are related to skills, infrastructure, LMS quality, and performance expectancy. But the impact of economic issues on the lecturers' desire to use is not largely expressed.

With the foregoing findings, the researchers recommended that E-learning policy for the universities and higher education institutes should be developed. The policy should contain all relevant components that clearly address issues related to governance, quality, training, implementation plan, rewards, and incentives. Likewise, training and workshops should be conducted for all users and university management with the necessary content for the target users. To facilitate the diffusion of the LMS in higher education institutes among all stakeholders, the Ministry of Higher Education should work on detailed policies and planned strategies for incorporating blended learning into the educational system. Furthermore, to address issues related to the governance and operation of LMS inside the university, the policymakers and high-level authorities should work on developing appropriate procedures and guidelines to formalize the tasks inside a framework within which the LMS should operate. As part of this, the roles and responsibilities of all stakeholders and procedures should clearly be indicated. And to address the quality aspects of LMS, guidelines should be defined that include the quality indicators for various aspects of

HELMS including teaching quality, e-content quality, and system quality. The quality of e-content and quality of teaching should have continuous monitoring to have a better outcome of teaching and learning. The university should provide technical supports for their teachers, helping them overcome the infrastructure, economic, and content-making challenges. Finally, the Higher Education Learning Management System (HELMS) designers and administrators should follow user-centric design rules and guidelines to enhance usability, reliability, availability, and accessibility of the system based on the users' needs for all relevant stakeholders. The MHEI (Maritime Higher Education Institution) should provide support and incentives for lecturers to conduct studies on E-learning from a variety of aspects to investigate the challenges, opportunities, trends, status, and factors influencing the use of E-learning among all stakeholders at both public and private universities.

In relation to the present study, the teachers who were the respondents of the study were, likewise, asked on what they could recommend to better or, to the most, maximize their capability in the use of LMS since they are the main stakeholders in the study. Of the 10, interviews, 3 of them recommended to the Academy to provide them continuous training and seminars not only in the use of LMS, but to the use of technology in the classroom as a whole. One them verbalized in the interview,

Well, we are already adept in the use of LMS in the classroom although sometimes I, myself, sometimes experience problems. With that, I ask assistance from my co-teachers. Hence, I highly suggest that the Academy provides us continuous training and seminar not only about LMS, but about the use of technology in the classroom, as a whole.

Professional development techniques such as training programs can help teachers eliminate resistance by increasing their computer competencies, thus improving their efficacy and attitudes.

As to logistical support, which is also considered a very important component of adopting technology in the classroom, 2 teachers mentioned that during major examinations which are conducted in the ERS and Ship-In-Campus, sometimes, they experience problems that when students have concerns about computer units or how to navigate the LMS, they could not assist them. According to them, though there available ICT staff, it happens sometimes that no one is available. Hence, they recommended that an ITC staff be in the examination venue for the whole duration of the tests. One them noted, *we sometimes experience problems during major examination periods in the ERS and Ship-In-Campus. Sometimes, no ICT personnel is present. So, I recommend that an ICT staff be in the venue for the whole duration of the test.* The other teacher commented on this, saying, *though ICT personnel are present during examination period, sometimes, there are instances that none of them is around, so if students have concerns, there are issues that we cannot address. I think they should stay there until the end of the test.*

To address issues related to the governance and operation of LMS inside the Academy, a teacher recommended that the Academy should work on developing appropriate procedures and guidelines to formalize the tasks inside a framework within which the LMS should operate. As part of this, the roles and responsibilities of all stakeholders and procedures should clearly be indicated. The teacher quoted,

sometimes, we are caught puzzled that we have a student attending in our class just to find out that he is enrolled in another class. There are also instances that a student is already officially enrolled based on his COR, but his name does not appear in the class list. Another problem that we encounter is in the encoding of grades both in the grade sheets (excel file) and in the NeoLMS. Sometimes, names of students in the grade sheets are not alphabetized and grades in the excel file does not exactly match the grades generated by the NeoLMS.

Conclusions.

rom the results of the study, this paper concludes that, in online classroom environment, LMS reinforces both teachers' teaching process and students' learning process. Active and blended learning systems have been proven effective in all teaching - learning processes. A carefully designed combination of traditional and flipped approaches produces better learning outcomes than lecture-free fully flipped classroom method. Despite the restrictions and preparedness, the Academy has managed to cope up the challenges of time. Faculty members, being the facilitator, designer, and planner of online activities, have managed to adapt to the new mode of pedagogy, learning technological skills and changing their ways in order to continue the call of their profession. This paper also concludes that teachers with positive beliefs about their capacity for technology find LMS both useful and east to use. This study also concludes that, despite of the obstacles encountered, the online instructors finally reconfigure the philosophy that they carry and engage themselves in the use of technology in the delivery of their lesson. This is shown in high level of capabilities exhibited by the teachers as respondents of the study. But since this new tool is so volatile, some instructors still need to continue to retool and reskill themselves in order to keep up with the fluidity of the virtual environment.

Recommendation.

The problem of another outbreak or pandemic is a never-ending threat to humanity. Likewise, changing nature of work and lifestyle have brought the creation of distance, blended, and hybrid learning modality that will never be put aside anymore; hence, it is here to stay and progressively evolve and reshape academic institutions. With this, this paper recommends that the top management of the Academy must really invest more to put the ICT department in its best condition. There should be constant and continuous support and involvement of all the stakeholders because the greatest risk to the success of LMS implementation is failure to involve all stakeholders in the planning process. Aside from this, a team of IT support system must lead the entire technical activity to train, develop, and motivate

online instructors, as well as students, in their virtual experience to achieve the fullest benefit LMS could provide to all stakeholders within the Academy. Proper continuous training of the online faculty must be recalibrated because it has long been established that teacher change in pedagogy when using digital technologies does not come about through a training approach only. Rather, effective professional development is driven by the teacher through self-directed pathways supported by online networked community that includes teacher from all educational levels. While this paper delved in assessing the teachers' level of capability in using the LMS, it is also recommended that students', as well as staff's, level of capability be assessed.

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