

# THE QUALITY OF ONLINE LEARNING DELIVERY AND THE LEARNING MANAGEMENT SYSTEM OF THE MEDICAL COLLEGES OF NORTHERN PHILIPPINES (MCNP) AND INTERNATIONAL SCHOOL OF ASIA AND THE PACIFIC (ISAP): A CORRELATIONAL STUDY

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## Abstract

The spike of the COVID-19 in the country impedes the delivery of the face-to-face education thus the online learning is the primary line among educational institutions to continue the delivery of learning process among the learners. Despite of this, there are limited literature that shows the implementation of such modality thus this study came into being to assess the delivery of the online learning and also to assess as one the learning management system of the Medical Colleges of Northern Philippines and International School of Asia and the Pacific. Descriptive correlational research design was used in this study among the 1, 996 students and 93 teachers. A descriptive statistic, independent t-test and Pearson-r were statistically used for the analysis of the data. Result shows that the respondents' assessment on the delivery of online learning and the learning management system do not have significant difference. They assess the delivery of the online learning as "High Quality" and Good for the learning management system of the institution. Furthermore, the delivery of online learning and the learning management system are significant with each other.

**Keywords:** Alimannao, LMS, Moodle, online learning

## INTRODUCTION

The coronavirus epidemic has affected the interaction between instructors and students in higher education institutions. As a result of the epidemic, institutions were forced to conduct all student interactions online. Many countries took precautions to prevent the virus from spreading and to assure the continuity of the educational process, and institutions all around the world adopted online learning. While internet-based learning is often seen as a supplement to conventional learning, during the Coronavirus epidemic, it became a critical component for keeping schools and colleges open. This paradigm shift may cause changes in students' perceptions of this kind of instruction, and their perceptions may differ from those reported in prior research. Thus, we attempted to document the occurrence of such modifications in our study.

Previous research indicates that E-learning has numerous advantages for students because it is more flexible (Dhawan, S., 2020) and it may increase connection with students by offering

asynchronous and synchronous tools such as e-mail, forums, chats, and videoconferences (Marinoni, G.; Van't Land, H.; Jensen, T. , 2020; Anwar, K.; Adnan, M., 2020) Furthermore, internet technologies facilitate the simultaneous distribution of content to a large number of users; E-learning platforms provide many benefits to learners such as control over the content, control over the time spent learning, and thus the process can be adapted according to the learner's needs and learning objectives (Suresh, M.; Priya, V.V.; Gayathri, R, 2018). This may lead to improved contact with students, and despite certain inherent problems brought on by the current crisis, E-learning may improve students' learning process. Furthermore, according to research, they discovered that accessibility, connectivity, a lack of adequate equipment, social difficulties represented by a lack of contact and engagement with instructors and peers, and communicating effectively with the academic community were some of the key challenges.

## **RESEARCH METHODOLOGY**

This portion will present the methodology used in the study. It will present the design, respondents, the tool, procedures and the analysis of data which was used in this study.

This study used the descriptive correlational research design as it aims to describe the quality of the delivery of the online learning platform and the learning management system of the Medical Colleges of Northern Philippines and International School of Asia and the Pacific. It is also a correlational Research Design because it established a correlation between the aforementioned variables of the study.

In this study, there were two groups of respondents, the students and the faculty members of MCNP-ISAP. There were 1,996 students and 93 teachers who participated on the study. Respondents were purposively selected using the following criteria: was able to experience the learning management system at least one semester, had enough time in completing the survey and was able to access the google form of the survey.

A self-made questionnaire was developed for this study which was validated by a research expert. The data gathering tool was categorized into two major parts, the first part assessed the quality of the delivery of the online learning and the second part is the assessment of the respondents on the Learning Management System of the institutions. The tool is in Likert scale in which they will just tick the number which corresponds to their answer.

Upon mapping out of the things to be done in order to have the approval of the authorities, the researcher floated the data gathering tool via the google form to adhere to the IATF guidelines in combating COVID-19. After a week of gathering, the researcher closed the google form, tabulated the data and computed it using the appropriate statistical treatment of data.

This study utilizes the descriptive kind of statistics such as the mean for the analysis of the respondents' assessment on the quality of online learning delivery and the learning management system. An independent t-test was used in testing the significant difference on the assessment of the teachers and students while Pearson-r was used to test the relationship of the aforementioned major variables of the study. All inferential statistics was set at 0.05 margin of error.

## RESULT and DISCUSSION

The result of the data gathered will be presented here, the discussion will also be given to shed light to the readers and to understand it fully.

**Table 1: Quality of Online Learning**

Variable	Group	Mean	Description	t-value	p-value	Decision
Course Quality	Teachers	3.45	High Quality	1.36	0.23	Not Significant
	Student	3.16	High Quality			
System Quality	Teachers	3.12	High Quality	2.05	0.16	Not Significant
	Student	2.97	High Quality			
Service Quality	Teachers	3.17	High Quality	1.41	0.24	Not Significant
	Student	3.10	High Quality			
User Satisfaction	Teachers	3.15	High Quality	1.60	0.21	Not Significant
	Student	2.94	High Quality			
LMS USE	Teachers	3.14	High Quality	1.37	0.54	Not Significant
	Student	3.05	High Quality			
Perceived Benefit	Teachers	2.95	High Quality	2.88	0.98	Not Significant
	Student	3.03	High Quality			
Overall	Teachers	3.16	High Quality	1.81	0.67	Not Significant
	Student	3.04	High Quality			

The table above shows that there a unanimous assessment between the students and the teachers in the delivery of the online learning platform of the institutions as evident by the mean average of 3.16 for teacher and 3.04 for students respectively in which it represents “high quality” of implementation on the area of course quality, system quality, service quality, user satisfaction use of LMS and its perceived benefit. The table also highlighted that there is no significant difference on the assessment of the two groups of respondents which shows that the students and teacher do have same assessment on the quality of online learning delivery ( $p > 0.05$ ).

In this sense, establishing LMS quality in the online environment refers to whether LMSs functioned as intended to reinforce user happiness and allow e-learning (Adair & Shattuck, 2015; Oliveira, Cunha, & Nakayama, 2016). The happiness of LMS users in the online environment applies to both students and teachers. LMS quality is important whether it works as planned by meeting users' objectives and needs to promote their happiness while enabling e-learning (Adair & Shattuck, 2015). Furthermore, LMS quality in the online environment meets both learners' educational and instructors' instructional outcomes, and as indicated in the table above, the Institutions' LMS comply with this criterion.

The chart above also demonstrates that, according to the respondents, the MCNP-ISAP LMS system is extremely successful in online course delivery. This assertion is substantiated by the following literatures, which state that implementing the Online Learning Consortium's (OLC) five pillars of excellent online education results in LMS quality in the online environment. That is excellence in five interconnected areas: learning efficacy, scale, accessibility, teacher

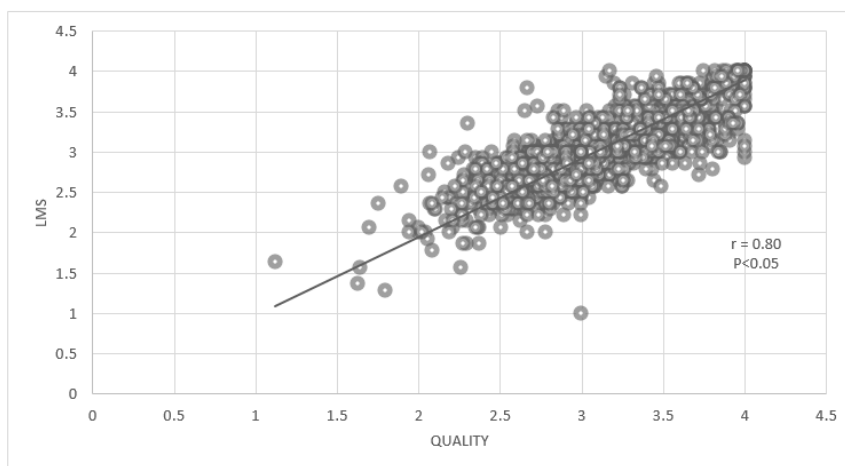
satisfaction, and student satisfaction (Online Learning Consortium, 2017). To begin, LMS quality should be aligned with contributions to learning effectiveness in order to ensure that online learners obtain a high-quality education (Online Learning Consortium, 2017). Second, LMS quality should be consistent with the scale principle, allowing institutions to provide the highest educational value to students while also reaching capacity enrollment goals (Online Learning Consortium, 2017). Third, LMS quality should be aligned with access by allowing learners to complete programs, degrees, or courses in their preferred fields. Fourth, LMS quality should be correlated with faculty satisfaction, with instructors finding the online teaching experience both professionally and personally gratifying (Online Learning Consortium, 2017). Fifth, the efficacy of each component of the educational experience should be reflected in the quality of the LMS.

In the long run, the importance of guaranteeing quality in the LMS is to help educational institutions accomplish their goals of gaining the potential competitive edge that e-learning may provide (Alsabawy, Cater-Steel, & Soar, 2013). In addition, to attain excellence in student and teacher engagement and success, as well as current, relevant, and interesting material (Alsabawy, Cater-Steel, & Soar, 2013).

**Table 2: Learning Management System**

Variable	Group	Mean	Description	t-value	p-value	Decision
Accuracy	Students	2.67	Good	1.98	0.32	Not Significant
	Faculty	2.97	Good			
Efficiency	Students	2.40	Good	2.96	0.09	Not Significant
	Faculty	2.53	Good			
Reliability	Students	2.82	Good	1.73	0.07	Not Significant
	Faculty	2.45	Good			
Security	Students	3.21	Very Good	1.67	0.42	Not Significant
	Faculty	3.15	Good			
User Friendly	Students	3.09	Good	2.15	0.71	Not Significant
	Faculty	3.19	Good			
Flexibility	Students	3.09	Good	3.20	0.63	Not Significant
	Faculty	3.15	Good			
Validity	Students	2.96	Good	3.13	0.72	Not Significant
	Faculty	3.02	Good			
Overall	Students	2.97	Good	1.56	0.45	Not Significant
	Faculty	2.92	Good			

Table 2 shows that the respondents assessed the Institutions Learning Management System as Good. Test of difference shows that the response of the students and teachers do not differ thus there is a constancy of assessment between the two groups of respondents.



**Figure 1: Test of Relationship between the Quality of the Delivery of the Online Learning and the Learning Management System**

The figure above shows that the Delivery of the online learning and the Learning Management System of the School is significantly correlated which mean to say that the two variables are dependent with each other. Researchers adhere to the idea that the success of an LMS implementation at a specific institution can be judged in a variety of ways. The learner interface, learning community, and content customization are all components of Wang's (2003) instrument. Some studies have used learner satisfaction with the system to determine the success of an LMS. Users' satisfaction has held a central role in many studies as one of the measurements for the success of LMS. Some studies have adopted other factors such as information quality and readiness, self-efficacy and self-regulated learning to measure users' satisfaction with the LMS system.

The impact of LMS goes beyond reducing the cost of educational investments to enhancing student learning. It is very difficult to quantify such kind of benefits in terms of ROI (return on investment) for LMS. However, it has proven to be difficult due to other intangible impacts and intervening variables. The use of LMS systems can be measured by how users navigate through the LMS. Declining usage is an important indication that the anticipated benefits of the system are not being realized (DeLone & Mclean 2003) and could indicate a failure in the system's effectiveness. There is a correlation between LMS usage and students' performance in courses offered via the LMS. Studies have also shown that regularity of LMS use was a strong indicator on explaining learners' performance for the courses they were taking. The findings corroborate with another study conducted by Jo, Kim, and Yoon at the Ewha Womans University.

Several studies have also shown a relationship between LMS use and student satisfaction (Naveh et al. 2012). Students are more satisfied with their courses when they use their LMS more frequently. Similarly, pleased students are less likely to complain (Tarigan 2011) and are more likely to enroll in additional courses (Booker & Rebman 2005). According to Palmer and Holt (2009), there is a positive relationship between satisfaction and the quality of learning

outcomes. Studies have linked LMS usage with student satisfaction with better learning outcomes. Students need to use almost all features of the system in order to realize the expected benefit, say some researchers. However, measuring time learners have spent on the system is inadequate, they say.

As a result, the success of LMS in the locality may be assessed by measuring the intensity and quality of usage of these systems. The adoption and use of LMSs in MCNP-ISAP is a milestone that may spell out the future of the learners.

## CONCLUSION

This study shows that the Delivery of the online learning platform of the Medical Colleges of Northern Philippines and the Intentional School of Asia and the Pacific do have a high quality performance. Also, the Learning Management System Performance is good. Further Analysis shoes that there is a strong positive correlation between the Deliveries of the online learning to the respondent's assessment of the Learning Management System of the Institutions.

## RECOMMENDATIONS

The following are recommendations to be offered based on the result of this study. The follow are as follows:

1. For the Teachers to continue in delivering high quality of online learning to out learners.
2. For the Students and Teachers to explore more on the use and features of the Learning Management System for a more systematic and creative way of presenting the lesson.
3. For the Information Communication Technology Department to have a more detailed training/ seminars presenting the features of the Learning Management System.
4. To the next researchers to explore more on the different contact of the learning management system, the adoptability of the learners in the online learning and to expound more the variables into a wider population.

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