

Digital Learning Through Learning Management System Towards Development of Localized Hybrid Education

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Abstract

In the rapidly evolving landscape of education, the integration of digital technologies has become imperative for fostering enhanced learning experiences. This study investigates the impact of digital learning facilitated by Learning Management Systems (LMS) on developing a localized hybrid education model. The research examined how the implementation of LMS contributes to the synthesis of traditional and digital learning methods, fostering a more dynamic and adaptive educational environment. The study employs a mixed-methods approach, combining quantitative data analysis and qualitative inquiry to explore the perceptions and outcomes associated with the adoption of LMS in educational settings. Key parameters under investigation include student engagement, academic performance, and the overall effectiveness of the hybrid learning approach in different cultural and regional contexts. Furthermore, the research delves into the challenges and opportunities encountered during the transition to a hybrid education model, considering factors such as technological infrastructure, teacher readiness, and student accessibility incorporating localized elements into the hybrid education framework, the study aims to identify strategies for tailoring digital learning experiences to the unique needs and cultural nuances of diverse educational communities.

Keywords: Educational Models, Digitization, Educational Innovation, Learning Management, Hybrid Education

Introduction

As a result of the coronavirus's widespread dissemination, changes have been made in the way instructors and students interact in higher education institutions. Schools were required to undertake all student-related activities online as a direct effect of the outbreak (Sobaih, A. et al. 2020). Governments throughout the globe reacted by enacting measures aimed at containing the virus and ensuring classroom safety. Online education has also been utilized by universities and colleges worldwide (Ali, W. 2020). Even though it is sometimes seen as an alternative to or addition to traditional education, online education emerged as a need to keep schools and other institutions operating amid the Coronavirus epidemic. This change in thinking may lead students' perceptions of this kind of training to alter in ways that contradict results from pre-pandemic studies.

With this, programs are adopting a more hybrid notion, a blending of both learning methods, since the virus' growth has started to slow down and vaccines are completely available. The world of education has undergone tremendous transformation because of these novel approaches. According to current study, e-

learning is advantageous to pupils in a variety of ways. This is because it emphasizes the requirements of the individual learner, is more adaptable and may boost student involvement by offering a combination of asynchronous and synchronous resources such as e-mail, discussion boards, chats, and video conferences (Dhawan, S. 2020). Notwithstanding the issues that have developed as a direct consequence of the current crisis, there is a potential that this will assist to increase communication with students and that e-learning will benefit students in more successfully studying (Anwar, K. & Adnan, M. 2020).

It is in this light that the researcher conducted the study to determine the impact of digital learning facilitated by Learning Management Systems (LMS) on developing a localized hybrid education model. Specifically, it sought to determine the extent of students' online engagement in terms of perceive ease of use, facilitating conditions and interaction. It also aimed to determine the extent of students' satisfaction on LMS in terms of usability and functionality, system quality and user satisfaction.

Moreover, this study investigated significant influence of student online engagement on their satisfaction on Learning Management System and to what extent do the profile moderate the students' online engagement and students' satisfaction on Learning Management System.

The results of the study will be the basis to craft a learning system to employ in a localized hybrid education scheme.

Conceptual Framework

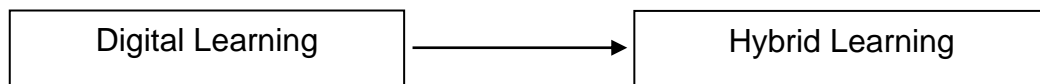


Figure 2 shows the relationship between variables considering the elements, forms and types of digital learning. The concepts of digital learning in terms of usage and acceptance rationalize the development of a hybrid learning. The determination of various types and forms of digital learning will be integrated into the development of a hybrid learning approach for educational application.

The framework serves as a guide in the analysis of data and in the formulation of a hybrid learning education platform. The degree of usage and acceptance by the respondents compels the development of a new platform. Moreover, empirical testing such as significant relationship between the variables is recommended using the framework. Furthermore, direct relationships are expected as various forms of digital learning is integrated to determine elements that are effective in the teaching-learning process.

METHODOLOGY

Research Design

To collect data for the study, the researcher will use a descriptive-correlational methodology. This will be used to investigate the relationship between the use of a learning management system and their satisfaction level. In addition, as Creswell (2012) recommends for quantitative research, a survey will be employed to collect data for this study. Cross-sectional surveys have typically been the method of choice in the field of educational research since they collect data in a single snapshot. Furthermore, it offers other benefits, such as speedy dissemination of information and evaluation of participants' perspectives (Creswell, 2012).

Locale and Participants of the study

The participants were 180 nursing students studying at higher education institutions in Nueva Vizcaya chosen through convenience sampling as they were accessible to the researcher and were likely to be

available. To gather data from them, participants were invited to voluntarily participate in the survey conducted.

Instrumentation

This study's research instrument was an adapted questionnaire which was divided into divided into four sections. Section 1 is composed of the required demographic data which includes students' age, sex, year level and hours spent in studying online in a day. The second section focused on student self-reporting of LMS activity, which was based on the work of York (2012) and Parker. The third section is the SEQ questionnaire used by Vogt and reported on by Coates (2006) was integrated to finish out the investigation. The final portion is concerned with the general satisfaction of students towards LMS.

Data Gathering Procedures

Everyone participating must first acknowledge that they have read and comprehended the corresponding document. Potential participants will be contacted individually to discuss the goals and procedures of the study. They will be given the opportunity to express their concerns and ask any questions they may have. Some participants may believe that because they consented to participate in the study, their participation should not be used against them if they are fired or forced to miss work. All potential participants will be notified that they are free to withdraw from the study at any time, including after providing informed consent. At all times, all information submitted by participants will be treated confidentially and anonymously. Special care will be taken to ensure the privacy of those who participate in the interviews when developing the poll, analyzing the data, and communicating the findings. It must be made clear to study participants that the age they provide during the interview will be utilized in the data provided. All employees were informed that their managers would have access to their data and would need to grant their approval before proceeding.

Statistical Treatment

SPSS will be used to do the statistical analysis. Cronbach's alpha was utilized by the researcher to determine how dependable the survey's questions, sections, and scales were.

Frequency count and percentage distribution was used to determine the demographic profile of the respondents and weighted mean was used to measure the extent of students' online engagement and students' satisfaction on LMS.

Multiple regression analysis was used to determine the influence of students' online engagement and students' satisfaction on LMS.

The researcher utilized a statistical correlation method using the Eta squared (η^2) to answer Question 5. Eta squared (η^2) is a common measure of effect size used in analyses of variance (ANOVAs) and analyses of covariance (ANCOVAs).

RESULTS AND DISCUSSION

Extent of Students' Online Engagement

Table 1 shows the summary of extent of students' online engagement in terms of interaction with the highest weighted mean of 4.32 with verbal interpretation of very great extent for the facilitating conditions, with a weighted mean of 4.27 with verbal interpretation of very great extent, and the last is the perceived ease of use with the lowest weighted mean of 4.26 with verbal interpretation of very great extent. The

result means that online learning enhances student motivation to learn, reduces the sense of isolation, and improves student performance in online courses.

It investigated how the use of a learning management system (LMS) by students affects their final grades. The amount of time students spent on digital learning, as measured by how many pages they looked at, was found to be positively connected to their final grades. In fact, the more freedom one has to use the LMS in whichever way they see fit, the better the conditions are for doing so. Because the resources needed to install a learning management system (LMS) in the process of providing education over the internet are already available to the public, interested users will be requested to test the system as soon as it is practicable for both educational and instructional reasons (Bervell & Arkorful, 2020).

As to perceive ease of use, the mean interpretation results to 4.26 qualitatively interpreted as very great extent which means that it is an important factor that can influence user adoption, satisfaction, and loyalty towards online platforms, as it reflects users' subjective evaluation of the benefits and outcomes, they expect to derive from using a particular technology or system. According to Tsai, W.-H., & Liao, H.-L. (2021) Perceived use refers to the extent to which an individual believes that a particular technology or system will help them achieve their goals and improve their performance in a particular task or activity.

The over- all mean interpretation result is for facilitating conditions showed 4.27, with verbal interpretation of very great extent, which connotes that online learning assist students in completing tasks and make study more relevant. Teachers can design online activities, guide and model interactions, define learning objectives, offer learners alternatives, and encourage problem-solving through decision-making processes using a learning management system (LMS). According to Rahiem, 2020. There will be no necessity for teachers to utilize a learning management system (LMS)). In fact, the more freedom one has to use the LMS in whichever way they see fit, the better the conditions are for doing so.

As to interaction, the over-all weighted mean of 4.32 with verbal interpretation of very great extent implies that interaction is deemed an important factor in effective online learning. The achievement of the desired learning outcomes is mostly due to interaction between the learner and the content. Kumar et al. (2021) stated that it is a crucial component of the usability and success of modern blended learning systems. Interaction between the learner and the content is largely responsible for the achievement of the expected learning outcomes.

Table 1. Extent of Students' Online Engagement

INDICATORS	MEAN	QUALITATIVE INTERPRETATION
Perceive Ease of Use	4.26	Very Great Extent
Facilitating Conditions	4.27	Very Great Extent
Interaction	4.32	Very Great Extent
Overall Mean	4.28	Very Great Extent

Extent of Students' Satisfaction on LMS

Table 2 shows the summary of extent of students' online engagement. In terms as for users' satisfaction, with the highest weighted mean of 4.27 with a verbal interpretation of very great extent. System Quality, with a weighted mean of 4.27 with a verbal interpretation of very great extent. And the usability and functionality, with the lowest weighted mean of 4.23 with a verbal interpretation very great extent. Hence, the over-all weighted mean is 4.29 with a verbal interpretation of very great extent.

Student satisfaction in e-learning contexts refers to how satisfied students are with the LMS's ability to satisfy their informational demands. Students frequently use their degree of engagement with the LMS to evaluate it. Hence, if their level of satisfaction is high, they continue to use the LMS (Diep et al., 2017). Furthermore, student happiness has a strong correlation with dedication, absenteeism, productivity, and performance (Duygu et al., 2018).

As to usability and functionality, the weighted mean results of 4.23 with verbal interpretation of very great extent. The result reveal that students are very highly satisfied with the usefulness and functions of the LMS. According to Babu et al (2019), the sole purpose of the LMS system is to effectively accomplish instruction. To ensure optimum utilization of the application, the e-learning platform needs to be customized with different features to support the interaction and delivery of instructions by the teachers and other users.

Discussing systems quality, the over-all weighted mean is 4.27 with a verbal interpretation of very great extent. The result means that students can feel convenience and confident in using LMS which resulted into a high level of satisfaction while using it. According Reischl and Toro (2018) said that LMS is a software program that can facilitate some activities such as to administrate the instructional materials through some educational activities, track and report related to students' information, and able to facilitate and distribute communication among students and teacher or facilitator.

The over-all weighted mean for user satisfaction revealed 4.37 with a verbal interpretation of very great extent. The result imply that students are contented with the speed, knowledge, and experience in using the LMS that satisfactorily meets their needs in online learning. User satisfaction can be measured through surveys, feedback forms, or focus group discussions, which can provide valuable insights into users' experiences and perceptions of the LMS. By monitoring and addressing user satisfaction, LMS administrators can improve the system's performance and usability, and increase user engagement and retention. (Hwang, Wang, & Liang, 2019).

Table 13. Summary of Extent of Students' Satisfaction on LMS

INDICATORS	WEIGH TED MEAN	VERBAL INTERPRETATION
Usability & Functionality	4.23	Very Great Extent
Systems Quality	4.27	Very Great Extent
Users Satisfaction	4.37	Very Great Extent
Overall Weighted Mean	4.29	Very Great Extent

1. Significant Influence On Students' Satisfaction On Learning Management System?

Significant Influence of Students' Online Engagement to Their Satisfaction on LMS.

A multiple regression was calculated to determine whether the Students' Satisfaction on LMS was affected by the Students Online Engagement

The data presented in Table 3 identifies the value of R squared ($R^2=0.646$) which denotes that 64.6 % of increase in the Students' Satisfaction on LMS is attributed to Students' Online Engagement. The p-value = 0.000 generated from the ANOVA table explains that we have enough evidence to show that the Students' Satisfaction on LMS is significantly affected by Students' Online Engagement. The respondents also agreed Students' Satisfaction is not significantly affected by the Facilitating conditions ($p = 0.064$)

while the Perceive Ease of Use ($p = 0.024$) and Interaction ($p = 0.000$) has a significant influence on the Students' Satisfaction on LMS.

According to Chandra and Napitupulu, 2021, with this indirect effect through system use are not significant; however, the perceived ease of use and system quality turn out significant affecting the student satisfaction. Perceived ease of use is the highest factor for affecting the satisfaction of the students to use Learning Management System (LMS) as the media for online learning. As added by the findings of structural equation modeling of Toring et al (2022), suggest that system content, interaction, and technology quality significantly and positively influenced students' perceived usefulness, subsequently leading to their satisfaction with the LMS. Further, Ohliati and Abbas (2019) concluded that perceived ease of use have a significant effect on student satisfaction.

Table 3. Multiple Regression Analysis on Students' Online Engagement and Students' Satisfaction on LMS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Model
	B	Std. Error	Beta		
(Constant)	.595	.212		2.813	.005
Perceived Ease of Use	.179	.079	.188	2.273	.024
Facilitating Conditions	.120	.064	.129	1.866	.064
Interaction	.559	.066	.561	8.456	.000
R square = 0.646, F = 106.909, Df1 = 3, Df2 = 176, P-value = 0.000					

Relationship between students' online engagement and their profile variables.

Eta coefficient was used to test the linear relationships while Eta squared coefficient is to determine the strength of association between Dependent variable and Independent variables. Table 15 show the eta squared of the following independent variables namely: Age (η^2)=0.017, which means that the age has 0.017 or 1.7% (small effect) of the variability of Students' Online Engagement explained by the age variable also it has no significant effect on the Students' Online Engagement with the p – value = 0.557. For the Sex (η^2) = 0.080, which means that the gender has 0.080 or 8.0% (medium effect) of the variability of Students' Online Engagement explained by the Sex variable also it has a significant effect on the Students' Online Engagement with the p – value = 0.000.

Females could achieve higher learning outcomes than males because they were more persistent and committed than males Females had stronger self-regulation than males, which also led to their significantly more positive online learning outcomes than males (Alghamdi et al., 2020). Results further revealed that sex is a moderating variable that influences the relationships between system content and instruction information with students' perceived usefulness of the LMS (Toring et al, 2022).

For the Year Level (η^2)=0.009, which means that the Year Level has 0.009 or 0.9% (small effect) of the variability of Students' Online Engagement explained by the Year Level variable also it has no significant

effect on the Students’ Online Engagement with the p – value = 0.670.

According to Toring et al (2022), year level is a moderating variable of the relationships between system content and interaction with their perceived usefulness of the LMS. In conclusion, this study reveals the model's usefulness in understanding the factors influencing students' satisfaction with an LMS.

Lastly for the Hours spent (η^2)=0.041, which means that the Year Level has 0.041 or 4.1% (small effect) of the variability of Students’ Online Engagement explained by the Year Level variable also it has no significant effect on the Students’ Online Engagement with the p – value = 0.202. Increases in the overall time spent online (accessing course content, additional examples, additional notes, references, etc.) has a positive effect on student performance, although this effect is marginal for the formal examination component (Korkofingas and Macri, 2018).

Table 4. Test of Relationship between Students' Online Engagement and Respondent's Profile

Dependent Variable	Independent Variable	eta value	sig	eta squared value
Students' Online Engagement	Age	0.130	0.557	0.017
	Sex	0.283	0.000	0.080
	Year Level	0.095	0.670	0.009
	Hours Spent	0.202	0.202	0.041

Relationship between students’ satisfaction on LMS and their profile variables.

Eta coefficient was used to test the linear relationships while Eta squared coefficient is to determine the strength of association between Dependent variable and independent variables. Table 16 show the eta squared of the following independent variables namely: Age (η^2)=0.023, which means that the age has 0.023 or 2.3% (small effect) of the variability of Students’ Satisfaction explained by the age variable also it has no significant effect on the Students’ Satisfaction with the p – value = 0.383.

For the Sex (η^2)=0.070, which means that the gender has 0.070 or 7.0% (medium effect) of the variability of Students’ Satisfaction explained by the Sex variable also it has a significant effect on the Students’ Satisfaction with the p – value = 0.000.

An interactive effect was identified between gender and age in relation to learning satisfaction. While respondents’ learning satisfaction scores were higher for males than for females for the range in age of 55–60, for the group aged 71 and above females scored higher than males. However, males in the range in age of 55–60 had a higher level of learning satisfaction than males aged 71 and above (Yang, Stephanie & Hsu, Wan-Chen & Chen, Hsueh-Chih, 2018)

For the Year Level (η^2)=0.010, which means that the Year Level has 0.010 or 1.0% (small effect) of the variability of Students’ Satisfaction explained by the Year Level variable also it has no significant effect on the Students’ Satisfaction with the p – value = 0.602.

The regression analyses found that the students were satisfied with the quality of their first-year experience when the courses offered assisted them in adapting to college life, helped them participate in social and academic activities, increased their motivation, and improved their academic skills (Al-Sheeb Hamouda and Abdella, 2018).

Lastly for the Hours spent (η^2)=0.076, which means that the Hours spent has 0.076 or 7.6% (medium effect) of the variability of Students' Satisfaction explained by the Year Level variable also it has a significant effect on the Students' Satisfaction with the p – value = 0.017.

According to Elshami and Abdalla 2017, this demonstrates that the students and faculty considered feedback during online learning to be useful and timely. Nevertheless, students suggested that adding online office hours would be beneficial to communication with their teachers. Effective feedback and communication from faculty compensate for the lack of face-to-face interaction and engage students in online learning [Citation58]. Informal feedback has also been associated with enhancing communication among peers and faculty as they offer ways to maintain or improve performance.

Dependent Variable	Independent Variable	eta value	sig	eta squared value
Students' Satisfaction	Age	0.152	0.383	0.023
	Sex	0.265	0.000	0.070
	Year Level	0.100	0.602	0.010
	Hours Spent	0.276	0.017	0.076

Proposed Digital Learning Model towards the development of Localized Hybrid Education

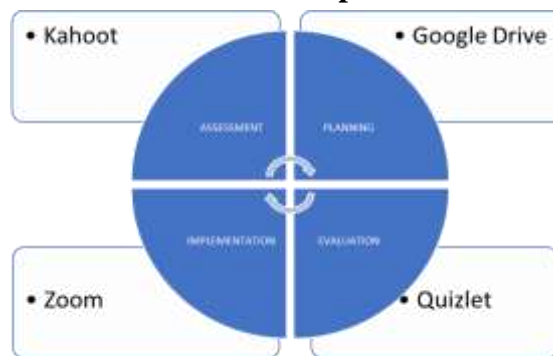


Figure 1: Proposed Localized Hybrid Model

A hybrid education framework provides a structured approach to integrating traditional face-to-face instruction with online learning components. This framework aims to maximize the benefits of both modalities while addressing their respective challenges. Here are key components and considerations for developing a hybrid education framework:

1. Learning Objectives and Outcomes:

Alignment: Ensure that learning objectives for both face-to-face and online components are clearly defined and aligned with overall course goals.

Differentiation: Identify which learning activities are best suited for in-person interactions and which can effectively be conducted online.

2. Curriculum Design:

Module Integration: Design courses in modules that blend face-to-face sessions with online activities. Each module should have clear objectives, activities, assessments, and resources.

Sequencing: Determine the sequence and timing of face-to-face and online activities to optimize student learning experiences and engagement.

3. Pedagogical Approaches:

Active Learning: Incorporate active learning strategies, such as group discussions, case studies, problem-solving activities, and simulations, both in-person and online.

Technology Integration: Utilize a variety of digital tools and resources (e.g., learning management systems, multimedia content, collaboration platforms) to enhance engagement and interactivity.

4. Assessment and Feedback:

Formative Assessment: Use formative assessments (e.g., quizzes, online discussions, peer reviews) to monitor student progress and provide timely feedback.

Summative Assessment: Design summative assessments (e.g., exams, projects, presentations) that evaluate mastery of learning objectives across both modalities.

5. Student Support and Engagement:

Orientation and Training: Provide orientation sessions and ongoing support to help students navigate the hybrid learning environment and use digital tools effectively.

Communication: Establish clear communication channels for students to interact with instructors and peers, seek assistance, and participate in discussions.

6. Instructor Role and Professional Development:

Facilitation: Train instructors in effective facilitation techniques for both face-to-face and online settings, emphasizing active learning and student engagement.

Adaptation: Encourage instructors to adapt teaching strategies and instructional materials to fit the hybrid format, while maintaining pedagogical quality and rigor.

7. Technology Infrastructure and Accessibility:

Resources: Ensure access to reliable technology infrastructure (e.g., internet access, devices) and digital resources for all students, addressing equity and accessibility concerns.

Support: Provide technical support and resources to assist students and instructors in using digital tools and troubleshooting issues.

8. Evaluation and Continuous Improvement:

Feedback Mechanisms: Collect feedback from students and instructors on their experiences with the hybrid model, and use this input to make iterative improvements.

Research and Innovation: Stay abreast of emerging trends and research in hybrid learning to continually refine the framework and incorporate best practices.

This framework provides a structured approach to implementing hybrid education, emphasizing the integration of face-to-face and online components to enhance learning outcomes and engagement. Educational institutions can customize this framework based on their resources, student demographics, and learning goals to optimize the effectiveness of hybrid learning experiences.

Hybrid Class Structure

This sample hybrid class structure demonstrates how a course can effectively blend face-to-face interactions with online activities to foster a dynamic and engaging learning environment. Adjustments can be made based on specific course requirements, institutional resources, and student needs to optimize learning outcomes and student satisfaction.

1. Face-to-Face Sessions (On-Campus)

Frequency: Bi-weekly, every Tuesday and Thursday

Activities:

- A. Lectures: In-depth discussions on key theories and concepts.
- B. Group Discussions: Small group activities to analyze case studies and apply theories.
- C. Hands-on Activities: Experiments and demonstrations related to principles.
- D. Q&A Sessions: Opportunities for students to ask questions and clarify concepts.

2. Online Components (via Learning Management System - LMS)

Platform: Moodle LMS (or equivalent)

Activities and Resources:

- A. Pre-recorded Lectures: Weekly lectures uploaded for asynchronous viewing.
- B. Readings: Assigned textbook chapters and supplementary articles.
- C. Discussion Forums: Weekly online discussions on assigned topics moderated by teaching assistants.
- D. Quizzes and Assignments: Online quizzes to assess understanding and application of course materials.
- E. Virtual Office Hours: Scheduled online sessions with the instructor for additional support and clarification.

3. Assessment

Formative Assessments: Weekly quizzes on LMS to gauge understanding of lecture and reading materials.

Summative Assessments: Midterm and final exams, combining multiple-choice questions and short essays, administered on-campus.

Projects: Group projects that integrate theoretical knowledge with practical applications, presented both in-class and through online.

4. Student Support and Engagement

Orientation: Onboarding session at the beginning of the semester to familiarize students with the hybrid format, LMS tools, and expectations.

Technical Support: 24/7 access to IT support for troubleshooting LMS and technical issues.

Academic Support: Regular office hours, both in-person and online, for individualized assistance with course content and assignments.

5. Instructor Role

Facilitation: Balancing face-to-face and online interactions to promote active learning and engagement.

Feedback: Providing timely feedback on assignments and discussions to guide student progress.

Integration: Ensuring seamless integration of course content between in-person sessions and online activities.

6. Technology and Resources

Equipment: Access to computers, internet, and multimedia resources during on-campus sessions.

Library Resources: Online access to psychology journals, e-books, and research databases through university library subscriptions.

Software: Required software (e.g., statistical analysis tools for psychology research) available both on-campus and remotely.

7. Continuous Improvement

Feedback Mechanisms: Regular surveys and feedback forms to gather input from students on the effectiveness of the hybrid format and suggestions for improvement.

Professional Development: Participation in workshops and conferences on hybrid learning and pedagogical innovation to enhance teaching practices.

Conclusions

As to the extent of student online engagement in terms of interaction as seen by the respondents as very great extent. The highest mean level “Interaction” in a very great extent, on the other hand the least level of indicator of the extent of online engagement in terms of Perceived Ease of Use” The result means that online learning enhances student motivation to learn, reduces the sense of isolation, and improves student performance in online courses.

As to the extent of student satisfaction on LMS in terms of “User Satisfaction” as seen by the respondents as very great extent, on the other hand the least level of indicator of the extent of student satisfaction on LMS use in terms of” Usability and Functionality”. The results means that the student satisfaction in e-learning contexts refers to how satisfied students are with the LMS's ability to satisfy their informational demands. Students frequently use their degree of engagement with the LMS to evaluate it.

As to the relationship between student’s satisfaction and respondents’ profile. Gender has medium effect of the variability of students’ satisfaction especially Male which has the higher level of learning satisfaction. Furthermore, the results show in the year level and hours spent also has significant relationship, in the variability of students’ satisfaction.

In summary, the results showed that online engagement does not have a significant influence on students’ satisfaction with Learning Management System, that the profile does not moderately affect the students’ online engagement and students’ satisfaction with Learning Management System. However, year level and hours spent also has a significant relationship, in the variability of students’ satisfaction.

Recommendations

In view of the conclusion of the study, the following are hereby recommended. The hybrid modes combine in-person and online instruction to make education more accessible to a wider range of students. The optimum utilization of the application, the e-learning platform needs to be customized with different features to support the interaction and delivery of instructions by the teachers and other users.

Moreover, the LMS is a software program that can facilitate some activities such as to administrate the instructional materials through some educational activities, track and report related to students’ information, and able to facilitate and distribute communication among students and teacher or facilitator. Lastly, the purpose of this analysis was to aid in the growth of local hybrid education by answering a few research questions and adding to what is already known about learning management systems (LMS), student involvement, and student performance in digital learning attained through LMS.

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