# Evaluating Lecturers Perception of Learning Management Systems at The University of Belize

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## Abstract

This research paper provides an overview of recent research and publications on task technology fit of a learning management system and the role of consumerization attitude. The objective of this research paper is to evaluate the perception of the University of Belize lecturers on learning management systems. As learning management systems gradually become crucial to education, lecturers involved in higher education must be able to adopt and accept an LMS that will allow them to achieve their teaching objectives in an efficient and effective manner. More empirical, teachers need to use LMS for multiple purposes such as to produce assessments, organize coursework and most importantly, to act as a facilitator for student-teacher interaction. The manner in which stakeholders adopt and perceive this tool is important to the successful use of LMS. The analysis reported in this research paper involves staff of the University of Belize (n=52) responses to surveys as well as secondary data from prior publications. The research focuses on participants' perceptions of four major constructs: Task Technology Fit, Expected consequences of LMS use, Perceived impact on teaching and Consumerization attitude-perceived fit/effectiveperformance improvement. Too much variance in participants' responses were found. To conduct this research, a modified version of the Technology-to-performance chain model was utilized. In the modified model, only the above listed constructs were used to determine the relationship between the existing dependent and independent variables. Based on responses received via survey from 52 lecturers of UB, it can be concluded that the staff at UB are satisfied with the current LMS, that is, Moodle System.

**Keywords**: Learning management system, higher education, Technology-to-performance chain model, Moodle system, constructs, perception, modified.

#### Introduction

With the emergence of the digital era, online technologies have been commonly used in higher education to promote a kind of co-learning between students and lecturers. According to Browne, Jenkins, & Walker (2016), in 2005 in the United Kingdom, 95% percent of all higher education institutions used a learning management system. This enables students to access learning materials while also allowing lecturers to upload content and assess student performance. Using a single platform, students and lecturers can access all of the learning materials at any time and from any place. Although many Universities around the world had already implemented systems prior to the current global pandemic, COVID 19, this was not the case at the University of Belize. Prior to the pandemic, students at The University of Belize attended classes in a conventional classroom environment or enrolled in a Blended Course, but never entirely online. In response to the pandemic, safety measures were implemented to minimize the spread of the virus. As a consequence, the University of Belize had to close its doors and engage in distance learning. Since the advent of e-learning at UB, lecturers are expected to use the learning management system available to conduct assessments, grading, and teaching via the LMS to maintain the accessibility of all programs to students. However, when it comes to the University of Belize transition from a conventional approach to an online-based approach, special consideration must be taken because lecturers may need to adapt and embrace the LMS, which is critical for the LMS's optimum use.

A learning management system is a software program that educators use to create, update, monitor, report on, and administer online classes on a university's server Ghazal et al. (2018). This research paper is focused on evaluating the lecturer's perception of the learning management system utilized at The University of Belize. Moodle is the learning management system implemented by The University of Belize to support lecturers to facilitate online teaching. Moodle's key functionality includes the ability to create online assessments, manage time, and include the tools needed to facilitate teaching (Dias, Hadjileontiadou, Diniz & Hadjileontiadis 2017). To conduct this research, a modified Technology to Performance Model was utilized to demonstrate the correlation between each construct. The study focuses on the perceptions of four main constructs among participants: Task Technology Fit, Expected Consequences of the LMS use, Perceived impact on teaching, and Consumerization attitude. In 1995, Goodhue and Thompson proposed the technology-to-performance chain framework to help end-users and organizations grasp and use information technology more effectively. The Task Technology Fit Model incorporates findings from user attitudes research as predictors of consumption and findings from task-technology fit research as a predictor of performance (McGill and Klobas, 2008).

The significance of this research is to measure the success of a functional learning management system at the University of Belize. It asks lecturers of the LMS about their perception, adoption, and attitudes towards the system. It would inform the university if the lecturers believe the LMS is successfully meeting their needs and if not how can it be improved.

## **Literature Review**

## Task Technology Fit

The challenges that educators should now respond to, including the degree of teaching suitability, has become common in almost every educational institution in Belize. However, the adoption and acceptance of learning management systems is growing. Furthermore, LMS have become common for both on-campus and distance students in higher level education. LMS can also perform administrative tasks and facilitate communication between instructors and students (Klobas & McGill, 2010). Tanya J. McGill and Jane E. Klobas, respectively conducted a literature review based on A task-technology fit view of learning

management system impact. The aim of their research was to explore the role of task technology fit in LMS success. In addition, they also concentrated on the factors that influenced and impacted task-technology fit. According to McGill and Klobas, it is useful to conduct research on models that can provide a predicament to the success of information systems (McGill and Klobas, 2008). Also, McGill and Klobas, stated that task-technology fit directly influences performance and indirectly influences expected consequences of use and attitude towards its use (McGill and Klobas, 2008). McGill and Klobas identified and used the task-to-performance-chain model in their research.

The TPC model was developed by Goodhue and Thompson to assist stakeholders, end-users and organizations, to understand information technology and to improve its use (McGill and Klobas, 2008). The model holds that the better the task-technology fit, chances are that the anticipated consequences of use of the system will be positive. To conduct their study, McGill and Klobas considered the WebCT LMS. The results of the study supported that task-technology fit had a positive effect on end users' attitude towards LMS use and as such, had an influence on LMS utilization. In our study, teachers' attitude was more complacent when it came to the use of LMS. The overall attitude proved that teachers were fine with using the LMS known to them. According to, Al-Maatouk, Othman, Aldraiweesh, Alturki, Al-rahmi and Aljerawi, someone's performance can be attributed to the level of support derived from TTF (Al-Maatouk, Othman, Aldraiweesh, Alturki, Al-rahmi & Aljerawi, 2020).

McGill and Hobbs researched on the task-technology fit for Virtual learning environments (VLEs) for both teachers and students. In their research, they intend to use the task-to-performance chain model to determine if the level of task technology fit success may differ between the types of users (McGill and Hobbs, 2008). According to Hwang and Thorn, satisfaction with an information system is frequently measured as a contributing factor to an information system's success (Hwang and Thorn, 1999). Moreover, satisfaction with an information system has also been identified as an indicator of information system success in the Delone and Mclean's (1992) model (McGill and Hobbs, 2008). Even though it was not included in the task-to-performance chain model, it is significantly related to research on e-learning.

In McGill's and Hobb's study, factors such as expected consequences of use, and attitudes towards use, were also considered. Just like this study, in their research, Mcgill and Hobbs sent surveys to lecturers of a university that were users of an LSM, WebCT. Their sample size was close to the one used in this research. McGill and Hobbs accumulated a total of 67 lecturers, whereas the researchers had a total of 52 respondents. However, they found out that VLE task technology fit mostly impacted the activities of students than it did for teachers. At the University of Belize, this was not the case. The results showed that UB lecturers that have only used one LMS, Moodle, believe that it might not be the best choice for their teaching preferences. However, the difference between the perceptions of students and lecturers, is a result of many contributing factors, (McGill and Hobbs, 2008). Additionally, they concluded that there is a negative relationship of user satisfaction and task complexity, similar to the outcome of previous research. Interesting to know, the study also concluded that perceptions of lecturers' use of VLE were being neglected. In one of the questions, a lecturer commented that it should be important to improve the users knowledge on WebCT- LMS. One of the limitations of the research is that both student and teacher relationship outcomes should be analysed more in depth.

The adoption of a learning management system is a complex issue. According to Renzi, the decision to adopt an LMS in higher education is not only based on selecting a complex software system but more so on the LMS's ability to satisfy the institution's particular educational need (Weller, 2007). The most commonly used LMS are WebCT, (used in McGill and Klobas and McGill and Hobbs research) and Blackboard. Nonetheless, Moodle is a prominent LMS today (Renzi, 2008). Renzi stated that LMS features support various teaching methods. For instance, when lecturing, teachers present material to a class with the implementation of a teaching method in a web environment such as pre recorded videos; the LMS feature

would then be the outcome in the form of course material (Renzi, 2008). Similar to McGill and Hobbs' suggestion, Renzi suggests that the teaching methods indicated by the teachers must be taken into account alongside the LMS features.

All in all, the perception of lecturers on learning management systems depends on several independent variables. These include perceptions, adoption and attitude, which we assumed in our research. To this we add the importance of impact on lecturer choice of LMS to enhance their teaching methods.

## Methodology of the Study

## **Participants**

The objective or aim of this research study was to evaluate the perception of the Learning Management System (Moodle) utilized by lecturers at the University of Belize. Moodle was the LMS considered in this study. The respondents of the survey consisted of staff members from four academic departments within the University of Belize. There were two sets of respondents; teachers who have only used Moodle and secondly, teachers who have used moodle and also other LMS.

#### **Procedure**

As opposed to McGill's and Klobas research, a modified version of the task-to-performance model by Goodhue and Thompson was used to construct this study. The survey was constructed using only four distinct constructs from the Task-to-performance chain model (Goodhue and Thompson, 1995), which has been widely used in research. These interrelated constructs include, task-technology fit, perceived impact on teaching, expected consequences of LMS use and consumerization attitude. While Mcgill and Klobas considered WebCT for their research, the researchers used Moodle. The study was conducted on data collected from 52 lecturers from within four distinct departments at the University of Belize. These lecturers were contacted by a colleague lecturer to participate in the survey. A link was sent to them where they easily accessed the questionnaire by clicking on the link and answering the questions in appendix 1. The participation of all respondents was voluntary but imperative to gather enough evidence on consumerization attitude impacting the task technology fit of a learning management system.

The modified research model identified in figure 1 displays the basic research relationship between each construct. Future researchers that wish to conduct applied research can utilize the below hypothesis.

## **Development of Hypothesis**

The hypothesized relationships between consumerization and task technology fit success variables are based on the theoretical and empirical work reported by Goodhue and Thompson (1995). As they suggest, the model combines insights on user attitude and task-technology fit relevance to performance. Accordingly, the study hypothesized the following six hypotheses:

- H1: Consumerization attitude will negatively influence perceived task-technology fit.
- H2: Consumerization attitude will positively influence perceived impact on teaching.
- H3: Consumerization attitude will negatively influence expected consequences of LMS use.
- H4: Task-technology fit will have a positive influence on expected consequences of organizational LMS use.
- H5: Task-technology fit will have a positive influence on perceived impact on teaching.
- H6: Expected consequences of LMS use will positively influence perceived impact on teaching.

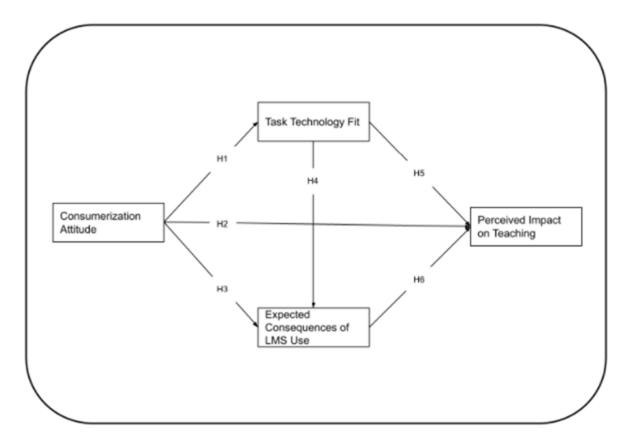


Figure 1 Consumerization attitude impact on TTF of a LMS

#### Construct Measurement

The questions used in the survey were modified for the perception on learning management systems of lecturers at University of Belize. Task technology fit, Expected consequences of LMS use, and Perceived impact on teaching were measured using questions from (McGill and Klobas, 2008). Consumerization attitude-perceived fit is measured using questions sourced from Infinedo (2018). Consumerization attitude-expected performance improvement was measured using questions from Ortbach et al. (2013). The constructs have several questions that will reflect the user experience, preference and attitude with learning management systems. The use of the seven (7) Likert scale was applied with anchors ranging from strongly agree (7) to strongly disagree (1) with the intent of capturing a better result of agreement and disagreement on the various constructs that were mentioned and also incorporate a midpoint that indicates neutral.

Table 1. The measurement items for Questioners.		
Constructs	Survey questions	Sources
Task Technology Fit	TTF1:Moodle fits well with the way I like to teach online. TTF2:Moodle is compatible with all aspects of my online teaching. TTF3:Moodle is easy to use. TTF4:Moodle is user friendly. TTF5:It is easy to get Moodle to do what I want it to do. TTF6:Moodle is easy to learn.	McGill and Klobas (2008)

	TTF7:It is easy for me to become more skillful at using Moodle.  TTF8:New features of Moodle are easy to learn.  TTF9:Do you think the output from Moodle to the students is presented in a useful format?  TTF10:Can you provide accurate information to your students with Moodle?  TTF11:Can you provide up-to-date information to your students with Moodle?  TTF12:Can you provide information students need in time using Moodle?  TTF13:Can you provide information that seems to be just about exactly what your students need with Moodle?	
Expected consequences of LMS use	EC1:Using Moodle will help me to accomplish my online teaching more quickly. EC2: Using Moodle will improve my online teaching performance. EC3: Using Moodle will increase my online teaching productivity EC4: Using Moodle will enhance my effectiveness as a teacher while teaching online. EC5:Using Moodle will make it easier to complete my teaching tasks while teaching online. EC6:Using Moodle will give me greater control over my teaching tasks while teaching online. EC7:Overall, I think that Moodle will be useful in my ability to tea online. EC8: Using Moodle will improve the quality of my online teaching.	McGill and Klobas (2008)
Perceived impact on teaching	PI1:Moodle has a large positive impact on my effectiveness and productivity as an online teacher. PI2: Moodle is an important and valuable aid to me in my online teaching. PI3: I teach better online with Moodle than without it.	McGill and Klobas (2008)
Consumerization attitude-perceived fit	If I could choose my own Learning Management System CAP1: It would fit well with teaching online. CAP2:It would fit well with helping me to be efficient in teaching online. CAP3:It would be compatible with my online teaching.	Infinedo (2018)
Consumerization attitude-expected performance improvement	If i could choose my own Learning Management System CAE1: My online teaching performance would improve. CAE2: My online teaching productivity would improve. CAE3: I would work faster while teaching online.	Ortbach et al. (2013)

# **Data Analysis and Results**

The purpose of this research is to evaluate the perception on LMS of lecturers at the University of Belize. Based on the findings, the researchers can make assumptions if the lectures find the system effective for teaching. Therefore, a quantitative research was conducted.

At this point, the research will move from basic research to applied research, so no hypothesis testing will be done; instead, the results of the data collection will be presented using histograms.

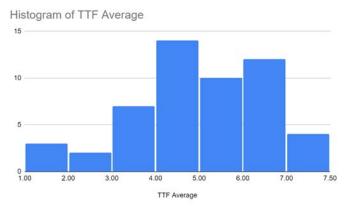
The sample size used for this research was 52 lectures at the University of Belize. The respondents characteristics are presented in Table 2. Female participants represented a slightly higher percentage with 54% when compared to males with 46% of the completed sample size. Most of the respondents were between 41-50 years of age. The faculty that responded mostly to our survey were those lecturers in FMSS, also with 40%. 38 of the participants have a Masters Degree. For this research the following methods were used to obtain the information:

Primary data: Questionnaires were utilized to obtain data from UB lecturers.

Secondary data: was a reviewed thought source such as the internet search engines and google scholar.

Table 2. Background Information		
Characteristics	Number	Percentage
Gender		
Males	24	46%
Females	28	54%
Age		
Between 20 – 30 years	6	12%
Between 31 - 40 years	14	27%
Between 41 - 50 years	21	40%
Between 51 - 60 years	10	19%
More than 60 years	1	2%
Education		
Bachelor's	4	8%
Masters	38	73%
PhD	10	19%
Faculty		
FEA	7	13%
FHS	5	10%
FMSS	21	40%
FST	18	35%
ODL	1	2%

Below are Histograms showing the results of the questionnaires collected from the respondents concerning the success of Moodle as the current learning management system utilized. The questions were based on Task—technology fit, Expected consequences of LMS use, Perceived Impact on Teaching, Consumerization Attitude - Perceived fit / Expected Performance improvement, and Consumerization Attitude - Expected Performance improvement.



**Chart 1** 

The histogram for Task—technology fit shows too much variance because there are two types of respondents. The first being, teachers that have only used Moodle and the other is the set of teachers that have used Moodle LMS and others.

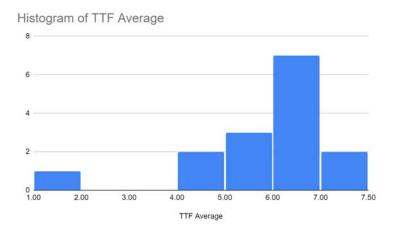
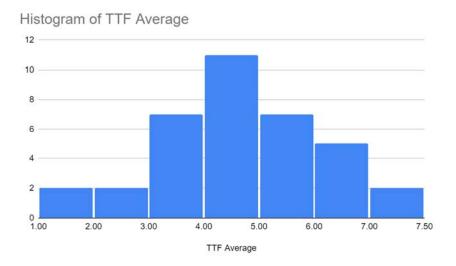


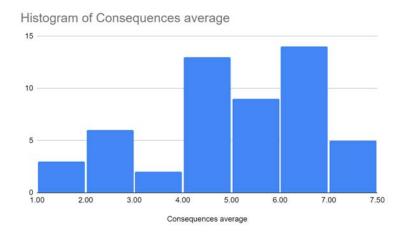
Chart 2

The histogram for average lecturers that have only used Moodle, demonstrates a total of 15 participants which is equivalent to 29% of the sample population. The participants rated the LMS between a six and seven, seven being the highest score. This suggests that teachers are comfortable with Moodle because they have not used another LMS and therefore, cannot make a comparison.



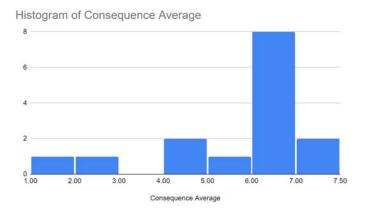
**Chart 3** 

The histogram for average lecturers that have used Moodle and another LMS, demonstrates a total of 36 participants which is equivalent to 69% of the sample population. The participants rated the LMS between a six and seven, five being the highest score. This suggests that Moodle may not be the best choice of LMS.



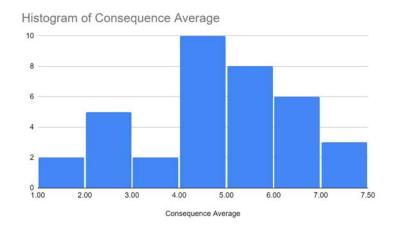
**Chart 4** 

The histogram for average of how lecturers view the expected consequences of using Moodle demonstrates a total of 52 participants rating between four to seven .This means that they believe they will still be able to teach while using Moodle as their current LMS.



**Chart 5** 

The histogram for average of how lecturers view the expected consequences of using Moodle demonstrates a total of 15 participants which is equivalent to 29% of the sample population. The participants rated the consequence between a six and seven, seven being the highest score. This means that lectures believe they will still be able to teach using Moodle as an LMS.



**Chart 6** 

The histogram for average of how lecturers view the expected consequences of using Moodle demonstrates a total of 36 participants which is equivalent to 69% of the sample population. The participants rated the consequence between a four and five, five being the highest score. This means that they believe they will still be able to teach using Moodle or also using other LMS.

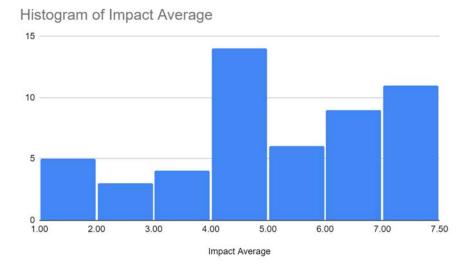
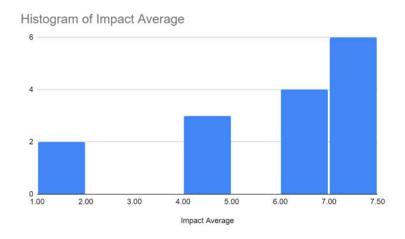


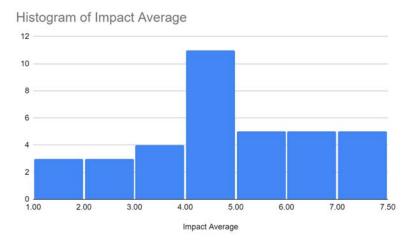
Chart 7

The histogram for average on how lecturers perceive impact of using LMS demonstrates a total of 52 participants rating between four to seven, five being the highest. This means that LMS will complement lecturers' teaching methods.



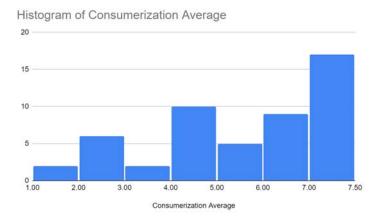
**Chart 8** 

The histogram for average on how lecturers perceive impact of using LMS demonstrates a total of 15 participants which is equivalent to 29% of the sample population. The participants rated Moodle only between a six and seven, seven being the highest score. This means that they believe that Moodle will help students to learn as if they were in face to face classes.



**Chart 9** 

The histogram for average on how lecturers perceive impact of using LMS demonstrates a total of 32 participants which is equivalent to 29% of the sample population. The participants rated Moodle and other LMS between a four and five, five being the highest score. This means that they believe that Moodle or any other LMS can aid lecturers in teaching strategy.



**Chart 10** 

The histogram for average on how lecturers perceive consumerization of using LMS demonstrates a total of 52 participants rating between four to seven, seven being the highest. This means that lecturers would rather select their own LMS that fits better to their teaching style rather than Moodle.

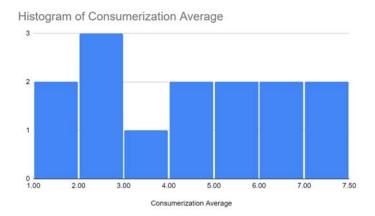


Chart 11

The histogram for average on how lecturers perceive impact of using Moodle only demonstrates a total of 15 participants which is equivalent to 29% of the sample population. The participants rated Moodle only between two and three, three being the highest score. This means that the teachers are satisfied with Moodle and would want to change to another LMS.

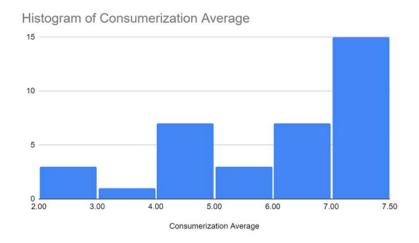


Chart 12

The histogram for average on how lecturers perceive impact of using Moodle or another LMS demonstrates a total of 36 participants which is equivalent to 69% of the sample population. The participants rated Moodle or another LMS between six and seven, seven being the highest score. This means that the teachers are satisfied with Moodle and also to complement with other LMS.

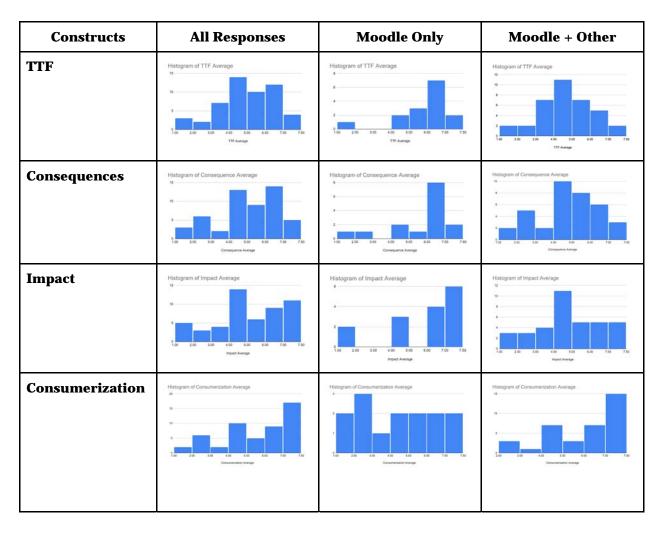


Figure 2 Summary of histograms

The compilation above suggests that most lecturers at the University of Belize have been exposed to LMS other than Moodle. There are two types of datasets: lecturers that have only used Moodle and lecturers that have used Moodle and other LMS. Lecturers at the University of Belize that have been using Moodle only, have successfully adapted to the LMS. The percentage of the teachers that have been exposed to other options, prefer to have a choice that can best fit their teaching style and therefore, believe that Moodle may not necessarily be the best choice of LMS at UB. In addition, lecturers that have only utilized Moodle have not faced any major impact because of their inability to make a comparison to another LMS. On the other hand, those lecturers that have used LMS that are not Moodle have a different opinion.

According to the data, these lecturers believe that their teaching performance would increase if they had their own choice of LMS. Also, by using their own LMS of choice, this would cause a positive impact on their effectiveness as an online teacher. However, those lecturers that have only been exposed to Moodle consumerize the learning management system more than those that found their own in the market and found it to fit well with teaching online. Lecturers believe that LMS can complement their teaching techniques similarly as in a traditional classroom setting. Overall, all teachers have opted for Moodle because it is the only LMS used at University of Belize. The fact that there is no choice available to UB lecturers limits their exposure and as such a general understanding of the impact of LMS use.

## **Conclusion**

This research has shown the importance of LMS and how it has become important in the daily life of lecturers and students. The idea of using LMS is intended to facilitate and enhance both learning and teaching commitments. The findings show that task technology fit, expected consequences of LMS use, perceived impact on teaching and consumerization attitude-perceived fit/effective-performance improvement are reliable instruments to evaluate the perception of lecturers on LMS at the University of Belize.

The results in this research were positive in terms of lecturers complementing LMS as part of their teaching style. The results also demonstrated that Moodle has proven useful in teaching. However, lecturers believe that other LMS can be incorporated to boost teaching quality. The analysis also revealed that Moodle is being used effectively by lectures and that LMS is not perceived as a challenge in terms of usage. This system is very user friendly, easy to understand and provides sufficient support for the end users. However, it is important to note, that the impact of the current LMS at UB, is that lecturers would prefer to have a choice. Also, the amount of variance explained by the model and the datasets provided, shows that most of the findings come from the task-technology fit (TTF) construct.

The data that has been analyzed represents ratings ranging from above average to high results for most sections. This means that lectures feel that Moodle-LMS has made a major contribution to lecturing on an online learning platform. LMS systems are becoming more efficient and effective in E-Learning. Information systems are of great importance because it has aided lecturers to deliver education content to students in an effective way in days where face to face teaching was not practical. In addition, lecturers feel LMS has improved their way of teaching. This research demonstrates that lectures feel that LMS is beneficial for online learning but there is still room for improvement.

#### Limitations

The main limitation that the researchers faced was the lack of time. The researchers were unable to expand the research due to the time frame of one semester. Subsequently if the time frame was longer, the researchers would have been able to further expand the research to different tertiary level institutions other than University of Belize. Another limitation that delayed the process of the research was that the researchers had to shift from a prior institution chosen to conduct the research to the University of Belize. However, by collecting the necessary secondary data, the researchers were able to prepare, analyze and interpret the findings.

## Recommendations

To improve the teaching quality and use of Moodle as a teaching tool for lectures, the following recommendations are made based on the findings of the study: Lecturers are to engage in training before engaging into using Moodle, reasons are to benefit students that will not be familiar with Moodle. Next, by allowing lectures to use other LMS to compliment Moodle, the university will be able to provide a higher level of education. Having analysed the variables related to teachers' perception on LMS, we conclude that emphasis should be focused on consumerization. Educators are the driving force that bring forth educational institutions to the next level. Finally, since the researchers were constrained by time, in the future the researcher could expand the research and test for hypotheses.

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## **Appendix**

# **Questionnaire - Lecturers Perceptions of Learning Management Systems**

## **Purpose**

- A. To gather empirical evidence of your perceptions of MoodleB. To fulfill the UNiversity's mission by publishing academic research papers.

## **Instructions**

Please complete this form:

1. Background Information	Answers:
Please indicate your gender:	Male ☐ Female ☐ prefer not to say ☐
Please indicate your age:	20-30
Please indicate your highest degree attained:	Associates □ Bachelor's □ Masters □ PhD□  MD □ Other □
Please indicate the faculty you teach in:	FMSS □ FEA □ FST □ FHS □
Please indicate which Learning Management System (LMS) you have used:	Moodle □ Google Classroom □ Other □

2 Teaching Preferences	Strongly DisagreeStrongly Agree
I prefer teaching face to face than online	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
I am more effective teaching face to face than online	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
Students learn more in my face to face classes than online	1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □
I would want to teach some online courses after the University resumes face to face teaching.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆

I would want to teach all my courses online after the University moves back to face to face teaching.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
I would not want to teach any online courses after the University moves back to face to face teaching.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
3. Prior Learning Management System (LMS) Use	Strongly Agree Strongly Agree
Please state the number of semesters you have used Moodle.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 🗆 > 6
I used Moodle to teach face to face prior to the University's move to online delivery.	□Yes □ No
I have taught classes utilizing an LMS other than Moodle.	□Yes □ No
How many semesters have you taught using an LMS other than Moodle.	0 🗆 1 🗆 2 🗆 3 🗆 4 🗆 >4 🗆
I used an LMS other than Moodle to teach face to face classes(prior to online delivery)	□Yes □ No
I plan to continue using Moodle to enhance my teaching after we return to face to face teaching.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
I would like to continue using my preferred LMS to enhance my teaching after we return to face to face teaching.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
4. Task-technology fit Please complete the following questions about online teaching.	Strongly DisagreeStrongly Agree
Moodle fits well with the way I like to teach online.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
Moodle is compatible with all aspects of my online teaching.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
Moodle is easy to use.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
Moodle is user friendly.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
It is easy to get Moodle to do what I want it to do.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆

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Moodle is easy to learn.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
It is easy for me to become more skillful at using Moodle.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
New features of Moodle are easy to learn.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
Do you think the output from Moodle to the students is presented in a useful format?	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
Can you provide accurate information to your students with Moodle?	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
Can you provide up-to-date information to your students with Moodle?	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
Can you provide information students need in time using Moodle?	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
Can you provide information that seems to be just about exactly what your students need with Moodle?	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
5. Expected consequences of LMS use	Strongly DisagreeStrongly Agree
Using Moodle will help me to accomplish my online teaching mo	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
quickly.	
	1
quickly.	1
quickly.  Using Moodle will improve my online teaching performance.	
using Moodle will improve my online teaching performance.  Using Moodle will increase my online teaching productivity.  Using Moodle will enhance my effectiveness as a	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
using Moodle will improve my online teaching performance.  Using Moodle will increase my online teaching productivity.  Using Moodle will enhance my effectiveness as a teacher while teaching online.  Using Moodle will make it easier to complete my	1
using Moodle will improve my online teaching performance.  Using Moodle will increase my online teaching productivity.  Using Moodle will enhance my effectiveness as a teacher while teaching online.  Using Moodle will make it easier to complete my teaching tasks while teaching online.  Using Moodle will give me greater control over my	1
using Moodle will improve my online teaching performance.  Using Moodle will increase my online teaching productivity.  Using Moodle will enhance my effectiveness as a teacher while teaching online.  Using Moodle will make it easier to complete my teaching tasks while teaching online.  Using Moodle will give me greater control over my teaching tasks while teaching online.  Overall, I think that Moodle will be useful in my ability to	1
using Moodle will improve my online teaching performance.  Using Moodle will increase my online teaching productivity.  Using Moodle will enhance my effectiveness as a teacher while teaching online.  Using Moodle will make it easier to complete my teaching tasks while teaching online.  Using Moodle will give me greater control over my teaching tasks while teaching online.  Overall, I think that Moodle will be useful in my ability to teach online.	1
Using Moodle will improve my online teaching performance.  Using Moodle will increase my online teaching productivity.  Using Moodle will enhance my effectiveness as a teacher while teaching online.  Using Moodle will make it easier to complete my teaching tasks while teaching online.  Using Moodle will give me greater control over my teaching tasks while teaching online.  Overall, I think that Moodle will be useful in my ability to teach online.  Using Moodle will improve the quality of my online teaching	1

I teach better online with Moodle than without it.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
7. Consumerization Attitude	Strongly DisagreeStrongly Agree
If I could choose my own Learning Management System it would fit well with teaching online.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
If I could choose my own Learning Management System it would fit well with helping me to be efficient in teaching online.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
If I could choose my own Learning Management System it would be compatible with my online teaching.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
If I could choose my own Learning Management System my online teaching performance would improve.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
If I could choose my own Learning Management System my online teaching productivity would improve.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆
If I could choose my own Learning Management System I would work faster while teaching online.	1 🗆 2 🗆 3 🗆 4 🗆 5 🗆 6 🗆 7 🗆