Students' Perception of Moodle: Consumerization Effects on Task Technology Fit of a Learning Management System at The University of Belize

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Abstract

A Learning Management System has become an integral mechanism in all aspects of education delivery globally. With the inception of the current COVID Virus Pandemic, it has become more significant in Belize. Consumerization refers to specific impacts to a business, from consumer originated technologies. The effects of consumerization may result in the adaptation and continued use of a Learning Management system. The reality is our limited literature of this content in the Belizean context. This research will aim to bridge this gap with the use of quantitative analysis to find the consequences and outcome of the use of Moodle by students at the University of Belize. The findings allowed us to present the effects of how consumerization affects how students adapt to Moodle and it's fit for the required tasks.

Keywords:

Consumerization, Learning Management System, Task-technology fit, Online learning, Virtual learning environment, Information system, Moodle.

Introduction

Quickly finding its way to Belize, the Coronavirus drastically changed the way of life for all Belizeans, including students. Since then, there has been a transition into a new form of normalcy for all aspects of life including education. With this transition, came the avid use of online learning which is a virtual and electronically supported learning that is dependent on the internet for the interaction and distribution of class materials between students and lecturers. Over the last decade, Universities has adopted learning management systems (LMSs) to reinforce the teaching and learning process via the use of information technology (Coates, James, & Baldwin, 2005). A Learning Management System is a web-based software application that is designed to handle learning content, student-teacher interaction, assessment tools and reports of learning progress and student activities. According to Coates (2005), "LMSs are also platforms that include learning systems, course management systems, content management systems, portals, and instructional management systems." (pg. 19-36). Various terms have been used to describe forms of education supported by information technology. These include e-learning, web-based learning, online learning, distributed learning and technology-mediated learning.

A virtual learning environment (VLE) is an information system that facilitates e-learning. In addition, information and communications technology has increasingly influenced higher education using a learning management system. In 2005, the majority (95%) of the higher education institutions in the UK were using an LMS. In a related work in Malaysia, higher education institutions (HEIs) have also developed various LMS as a medium for learning and interactive online teaching (Embi and Adun, 2010). Furthermore, a benefit of using an LMS is the capability to instruct online using a variety of modalities to meet learners' diverse needs. Contrary, "there has not been widespread change in pedagogic practice to take advantage of the functionality afforded by LMSs" (Becker & Jokivirta, 2007; Collis & van der Wende, 2002). Consistently, while using a LMS for learning or teaching there has been little analysis on its impacts (Coates et al., 2005).

Online teaching requires a new set of skills, knowledge, and professional growth. Faculty development programs often overlook factors that promote or inhibit the use of technologies among lecturers/professors. Despite the ubiquity of LMSs in education today, much of the evidence to support their use is anecdotal or of limited generalizability. Goodhue & Thompson (1995) stated that one factor shown to influence the use of information systems and their performance impacts is task technology fit. The Task-Technology Fit (TTF) theory provides a means of quantifying the effectiveness of technology in a system by assessing the relationship between the technology and the tasks the technology aims to support. This paper considers the role of task–technology fit in a developing country and the utilization of LMSs success and impacts on students at the University of Belize.

Literature Review

In the midst of the global pandemic, the University of Belize had to adjust the way teachers teach and also how students learn. In response, the University initiated Moodle as its primary component to further education virtually. This research seeks to establish if the Task Technology Fit (TTF) was adequate and also if the Learning Management System (LMS) was successfully utilized.

Learning Management Systems (LMS) Success

A focus to consider when studying the success of learning management systems (LMS) is the outcome of e-learning with that of the traditional face-face mode of learning. In their research, Piccoli, Ahmad, and Ives (2001) found that there were no significant differences between students who learn online and those who learn face to face. However, online students displayed a higher level of computer literacy and skills. Despite that, they were less satisfied with the learning process. Another study by Zhang, Zhao, Zhou, and Nunamaker (2004), suggest that online students portrayed an increase in academic performance and. Satisfaction. The fact that both outcomes shows diverse results is the very reason why we must continue to research. The learning management system is just one part of the equation; there are many other contributing factors that can influence the results of a particular research.

Another very important focus of learning management system (LMS) is the continued use and adaption of the system. There are eight critical factors for success and acceptance of online learning which are student motivation, instructor's attitude, instructor's teaching style, student to student interaction, student technical competency, infrastructure reliability, ease of access to technology and the support of

the university (Selim, 2007). In essence there must be satisfaction for students. Satisfaction is on the the key indicators for the adaption of new systems and as such are applied widely in IS practices (DeLone & McLean, 2016; and; Montesdioca & Macada, 2015).

Task Technology Fit (TTF)

The focus of task technology fit is how the capabilities of technology is matched to the needs of the task at hand or in short, how technology best supports a task (Goodhue and Thompson, 1995). The use of technology in an organisation is important but cannot be regarded fully if task technology fit is not considered since technology is to match its corresponding task (Goodhue and Thompson, 1995). Goodhue and Thompson (1995), suggested that an information system that is implemented successfully must recognize both the fit between the technology and the task it was designed for and the task the technology is used for. Another research by Glowalla and Sunyaev (2014) and Lee and Lehto (2013), reported many positive effects of task technology fit on information systems, including increased in performance and an overall positive advantage and achievements.

Consumerization

The consumerization construct lends its focus to the impact and consequences on learning and the fit of the Learning Management system. That is, it plays an integral role to establish if the selected system suffices the needs of students and the university on a whole, and in an effective and successful manner. Lebek, Degirmenci and Breitner (2013), reported that users will willingly subscribe to using their own devices if it deem beneficial to them although they may encounter limitations through security mechanisms.

Methodology

Construct Measurement

To solidify the effects of consumerization and how it affects Task Technology Fit, a quantitative analysis was completed among the students of the University of Belize. The analysis was a survey that was designed with a frequency from 1 to 7 on the focus of 1 being “strongly disagree” and 7 being “strongly agree”. The constructs measured were Task Technology Fit, Consumerization, Consequences, and impact as can be seen in figure 1 below.

Research Questions/Hypothesis

These are the (6) six research questions we came up with; however, we are not going to test the hypothesis, or the model, other researchers are free to test them.

- Social norms will positively influence LMS utilization.
- Attitude towards LMS use will influence LMS utilization.
- Facilitating conditions will positively influence LMS utilization.
- Task–technology fit will positively influence attitude towards LMS use.
- Expected consequences of LMS use will positively influence LMS utilization.
- Task–technology fit will positively influence expected consequences of LMS use.

Construct	Survey Questions	Source
Task Technology Fit	• Moodle fits well with the way I like to study online. • Moodle is compatible with all aspects of my online study. • Moodle is easy to use. • Moodle is user friendly. • It is easy to get Moodle to do what I want it to do. • Moodle is easy to learn. • Using Moodle for online classes will help me to accomplish my study more quickly. • Using Moodle for online classes will improve my performance in units. • Using Moodle for online classes will increase my productivity. • Using Moodle for online classes will enhance my effectiveness in my program of study. • Using Moodle for online classes will make it easier to complete my learning tasks. • Using Moodle for online classes will give me greater control over my learning tasks. • Overall, I think that Moodle will be useful in my online studies* Using Moodle will improve the quality of my online learning*	(Alshibly,20 11)
Expected Consequences	• Using Moodle for online classes will help me to accomplish my study more quickly. • Using Moodle for online classes will improve my performance in units. • Using Moodle for online classes will increase my productivity. • Using Moodle for online classes will enhance my effectiveness in my program of study. • Using Moodle for online classes will make it easier to complete my learning tasks. • Using Moodle for online classes will give me greater control over my learning tasks. • Overall, I think that Moodle will be useful in my online studies* • Using Moodle will improve the quality of my online learning*	Teece D.J. (1988)
Perceived Impact on Learning	• Moodle has a large positive impact on my effectiveness and productivity as a student in online classes. • Moodle is an important and valuable aid to me in my online studies. • I learn better online with Moodle than without it.	
Cosumerization Attitude	• If my teacher could choose their own Learning Managements System, it would fit well learning online. • If my teacher could choose their own Learning Managements System, it would fit well with helping me to be efficient in learning online. • If my teacher could choose their own Learning Managements System, it would be compatible with my online learning. • https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-018-0092-3 • If my teacher could choose their own Learning Managements System, my online learning performance would improve. • If my teacher could choose their own Learning Managements System, my online learning productivity would improve. I would work faster while learning online. • https://core.ac.uk/reader/301360300	

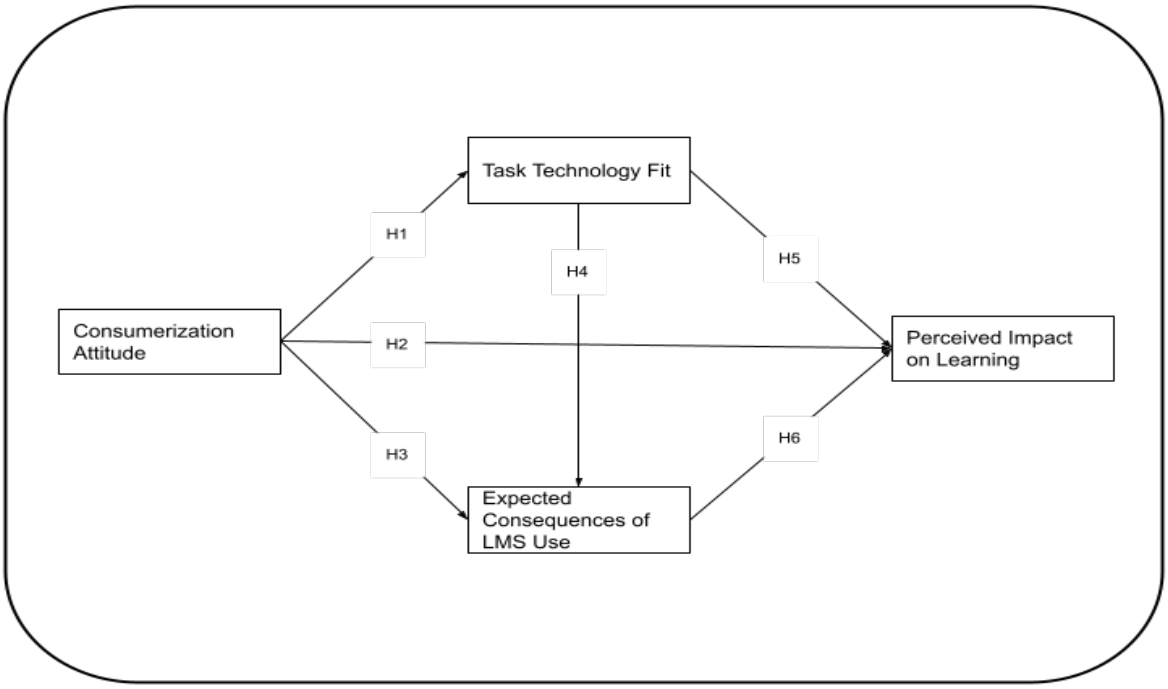


Figure 1: *Simplified TTF Model - Student*

Participants

The participants in this study consisted of students from the University of Belize registered in the 2020-2 semester**.**

Sample Size

A total amount of four hundred sixteen students participated in the questionnaire. These were all students enrolled in the University of Belize country wide. The research was not specific to a certain faculty; therefore any enrolled student was able to take part in the questionnaire.

Procedures

The study was conducted near the end of the semester. Students enrolled in the semester 2020-1 were targeted to give feedback of how effective the information system is being utilized by the University. The participant received the (7) section questionnaire by email and was given a reasonable time frame to respond. The questionnaire took approximately 10 mins to complete, the completion process was voluntary, and all responses were kept anonymous.

Data Analysis

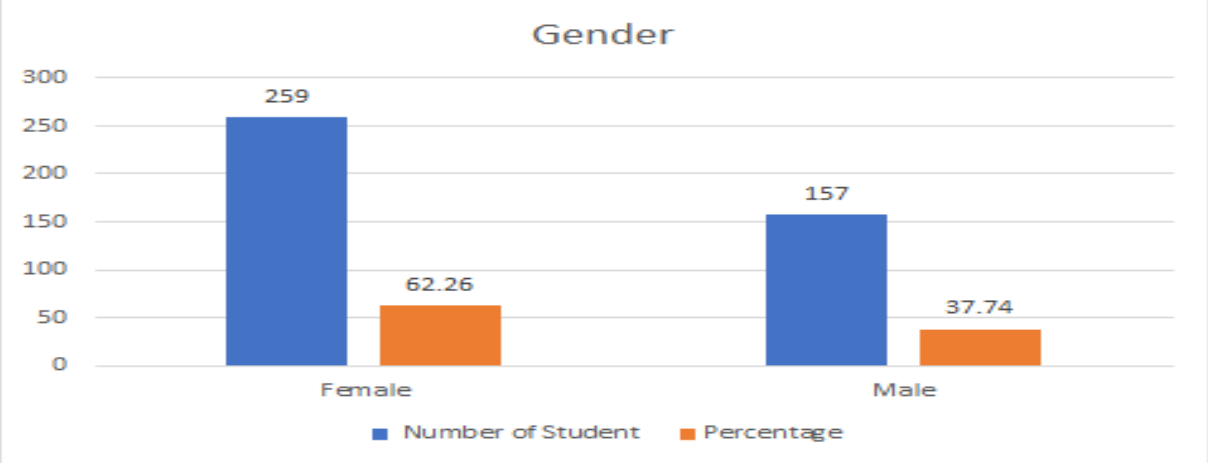
To assess if the information system (LMSs) being utilized at University of Belize is successful and task technology fit (TTF) is adequate in a developing country context, an online questionnaire was distributed UB students across various campuses country wide. A total of 416 responses were received. The framework was applied research which is based on the following constructs: Task Technology, Consequences, Impacts, and Consumerization. The data collected was analysed using Microsoft Excel 2010.

4.1 Characteristics of Sample

To gather information on the type of respondents that were involved in the research process, demographic questions were asked. The demographic questions discussed below include gender, age, faculty, student year, and education.

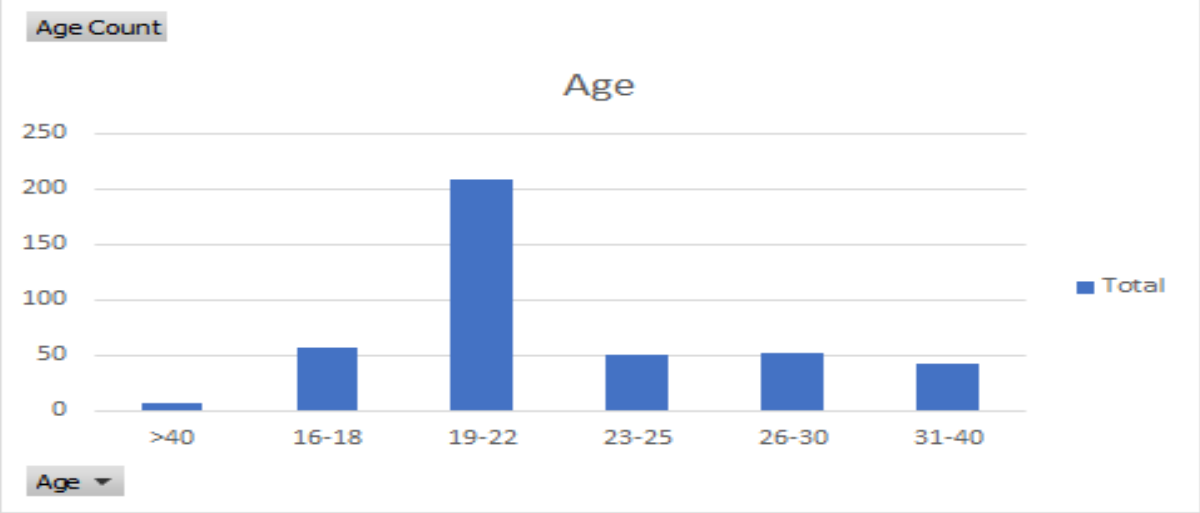
4.1.1 Gender

The respondents were asked to specify their gender in order to indicate their differences in perspectives for the information system(s) utilized at the University of Belize.



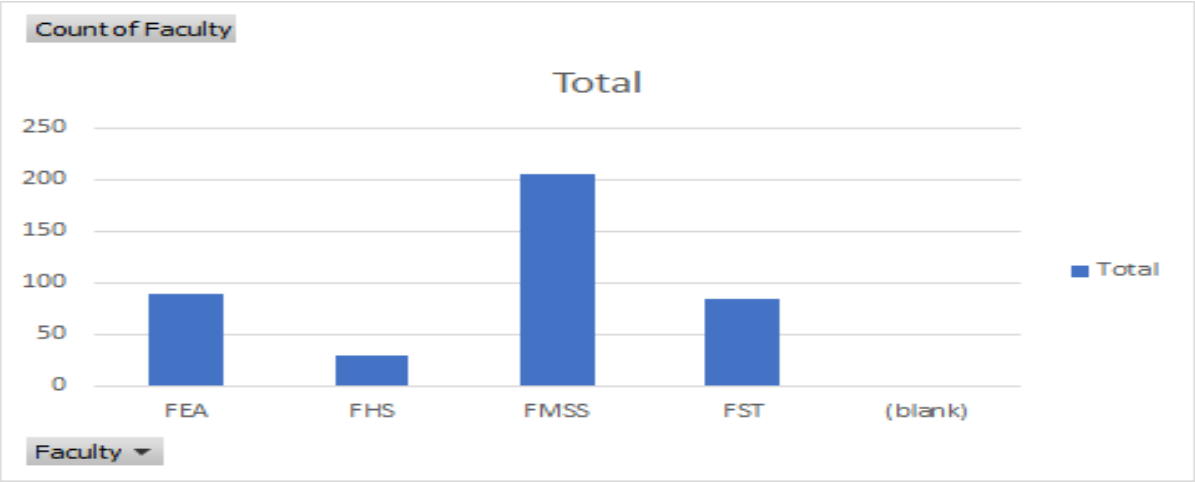
4.1.2 Age

To further assess the different perspectives of the information system(s) utilized by UB, the respondents were asked to indicate their age.



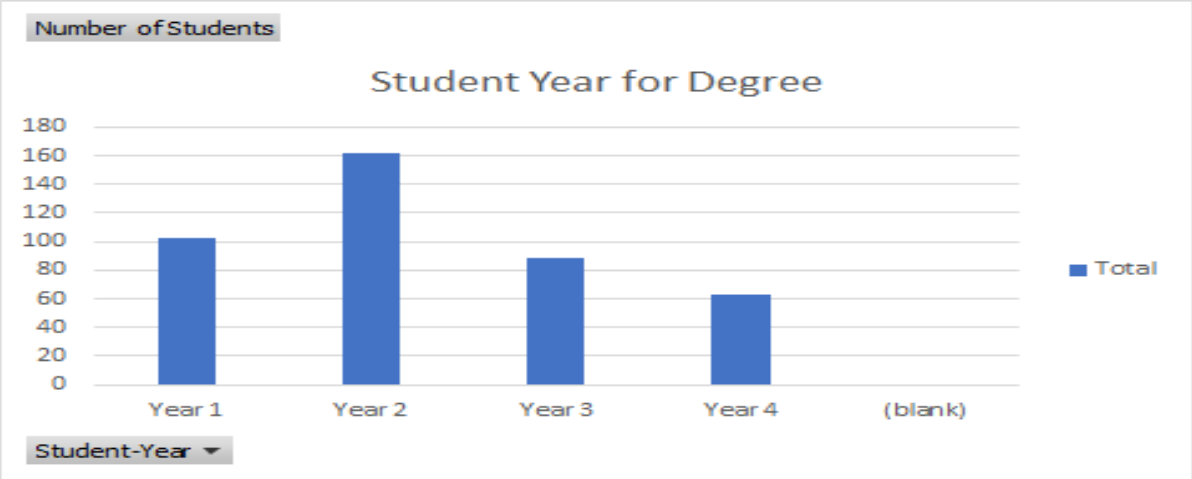
4.1.3 Faculty

In order to assess the disparities between faculties in terms of Online Learning, the respondents were asked to indicate their faculty.



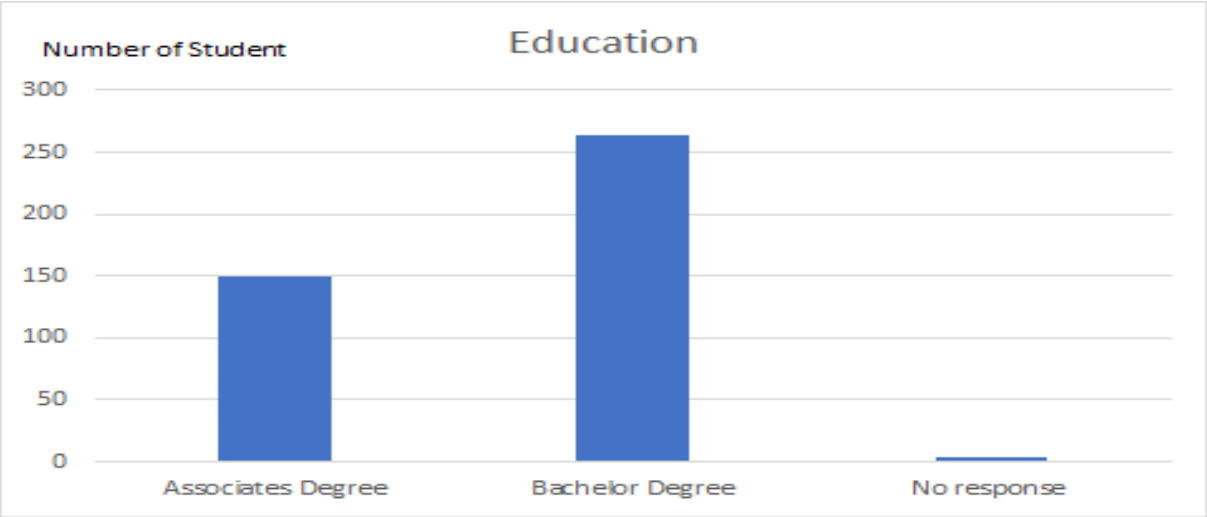
4.1.4 Student Year

To decipher whether the year of the respondents influenced their response on information systems and Online Learning at UB, the respondents were asked to indicate their number of years enrolled.



4.1.5 Education

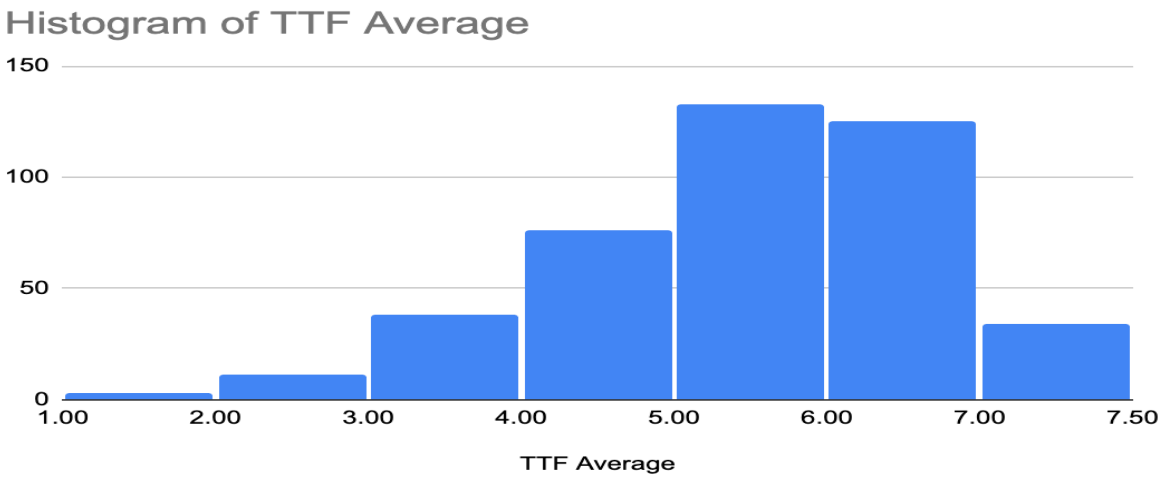
To help assess the utilization of IS and adequacy of task technology fit, the students were asked to indicate their degree enrolment.



4.2 Main Findings

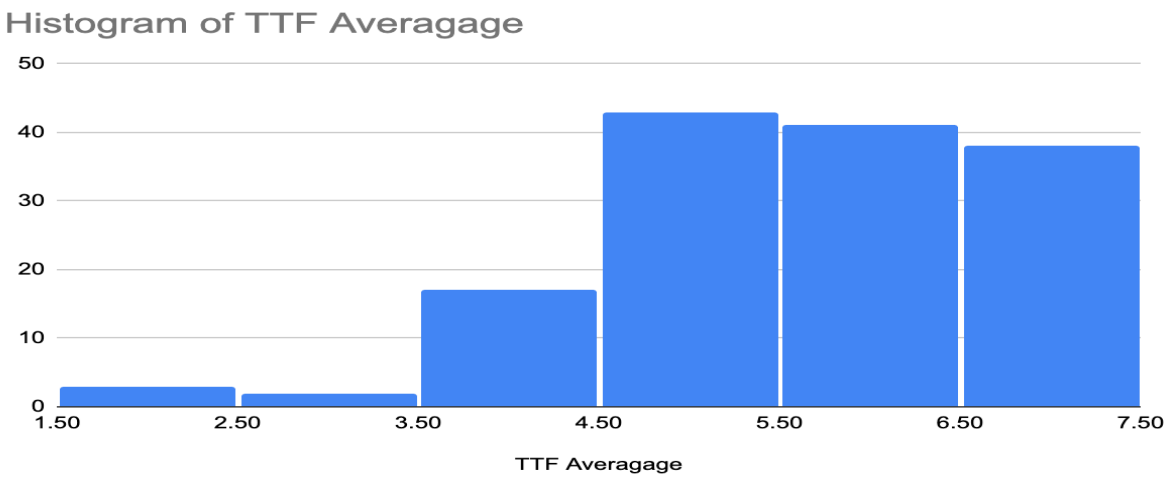
A frequency of 1 to 7, with 1 representing strongly disagree and 7 representing strongly agree, was used to collect the data being presented here.

4.2.1 Task Technology Fit - All Respondents



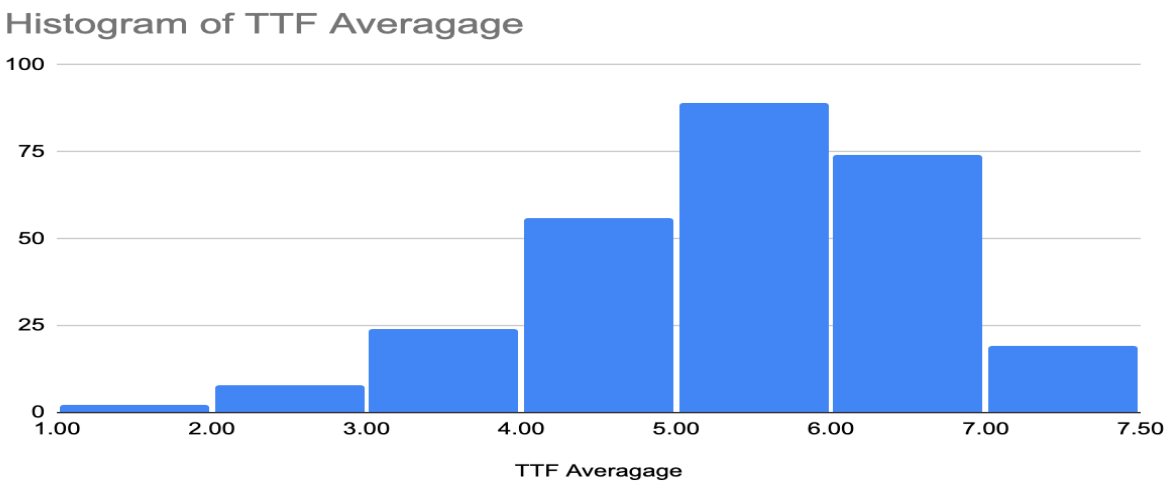
A total of 416 respondents took part in this data gathering. Of this total, we can see that the majority of the students agreed that Moodle is a Learning Management System that they are satisfied with. An estimated 245 students, which represents fifty percent of the respondents, chose the satisfaction point between 5 to 6 which is closer to the strongly agreed point at 7. The third highest score was an approximate 75 students who chose 4 on the frequency line. This amount still indicates that students are more satisfied with Moodle. An approximate 51 students chose below number 3 which translates that they are not satisfied with Moodle. On the other hand, about 40 students chose 7 which means that they are in strong agreement with the use of Moodle.

Task Technology Fit - Moodle Only



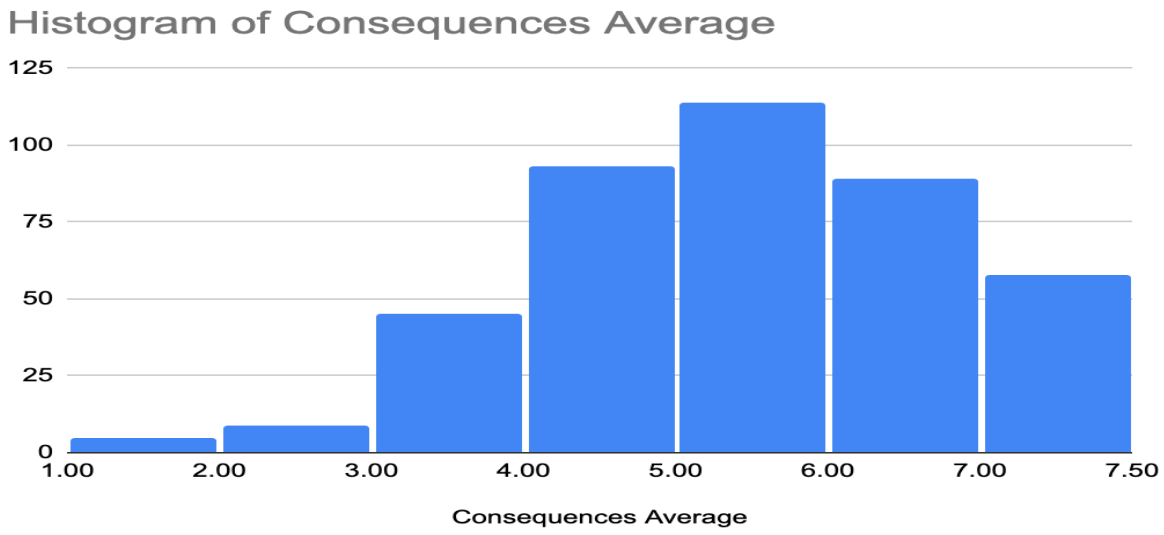
The above histogram represents an approximate 34%, or 144, of all respondents who took courses with only Moodle. Again we can see that the shape of this graph is skewed to the left which represents a greater satisfaction rate from these students. Of that 144 students, 84 % of them chose a satisfaction point between 4 to 7 , while the remainder of 16% stated that they are not satisfied.

Task Technology Fit - Moodle and other LMSs



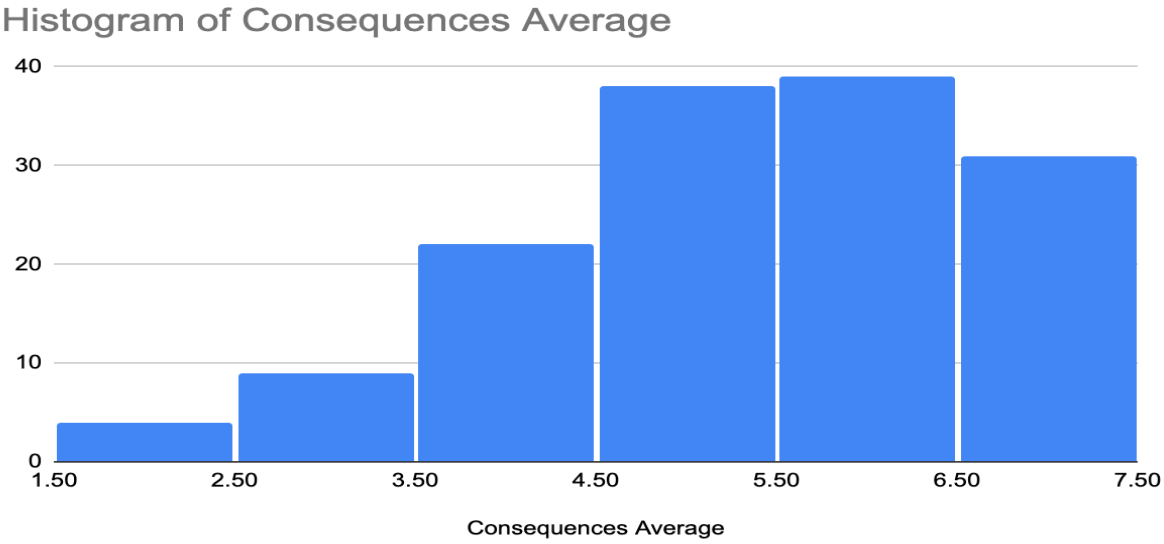
In this figure, approximately 66% or 272 students have indicated that they have learnt via Moodle and at least one other Learning Management Systems (LMS). This means that more students have learned using Moodle and some other management system. Again we can note that the histogram is skewed to the left which means that the respondents are mostly satisfied with the use of Moodle and some other LMS. 86% of this amount chose a satisfaction rate between 4 and 7 which translates satisfaction, while the other 14% chose between 1 and 3 representing less satisfaction.

4.2.2 Consequences - All Respondents



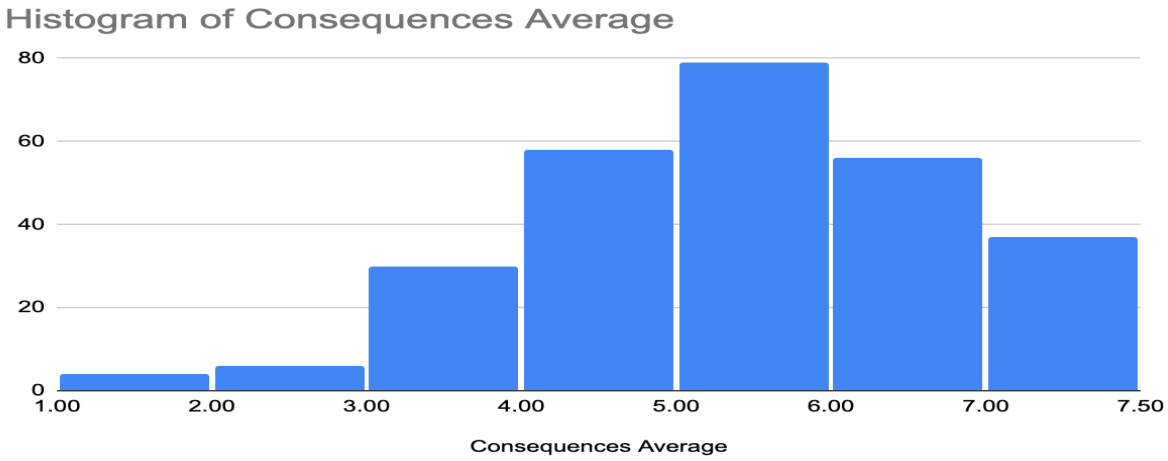
The outcome or consequence of using Moodle for all students is greatly skewed to the left. Majority of these students believe that Moodle is generally effective and is helping them in their studies. 85% of all students chose between 4 and seven which represents satisfaction. On the other hand, 15% are not satisfied with the outcome from using Moodle. It is worth mentioning that the "strongly agree" category increased across the board for the consequences construct when compared to the task technology fits construct. This means that more students were satisfied with the outcomes from using Moodle than they were satisfied with Moodle as their ideal Learning Management Systems (LMS).

Consequences - Moodle Only



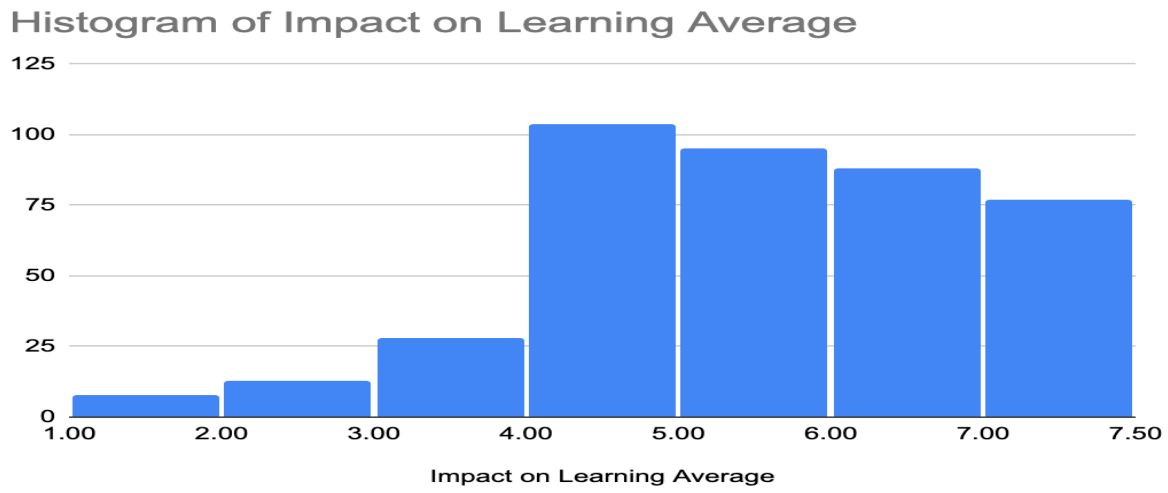
In this histogram, we see the consequence of using Moodle only. 143 or, 34% of the total correspondents represented this histogram. Again we can see that there is a general satisfaction with the consequences of using Moodle only. Of this 143 students, 83% of the students chose between 4 and 7 which represents that they are satisfied. The other 17% chose 1 to 3 which represents less satisfaction with the outcome of using only Moodle.

Consequences - Moodle and other LMSs



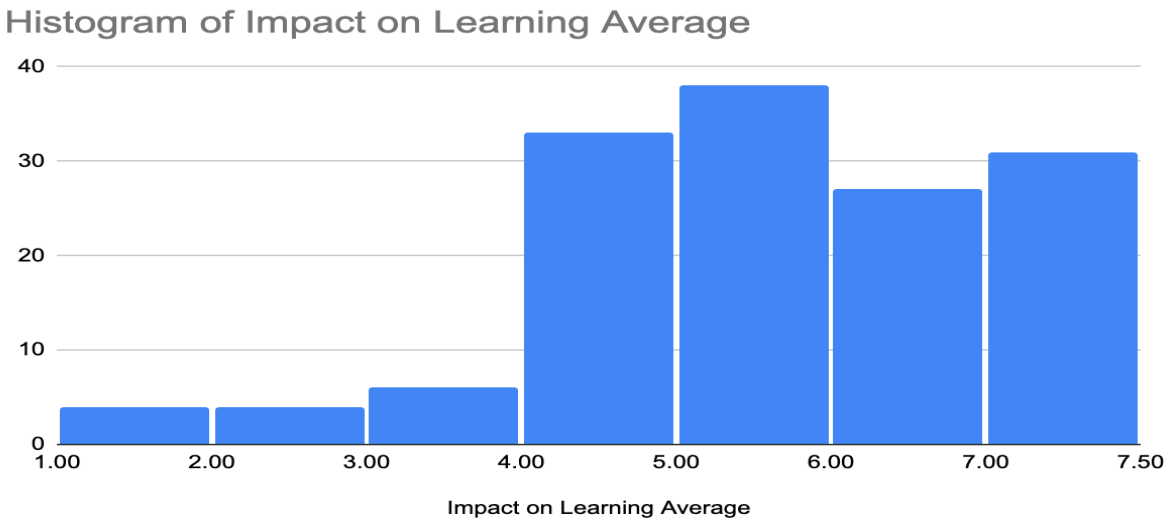
In this histogram for the outcome of using Moodle and at least 1 other LMS, we can see again that the majority of the students were satisfied with the use of at least 2 LMS at a rate of 66%. Of the 273 students, 85% of the students chose 4 to 7 on the line which means that they are more satisfied. The other 15%, through their selection, indicated that they were less satisfied with the outcome of using at least 2 LMS.

4.2.3 Impact All Responses



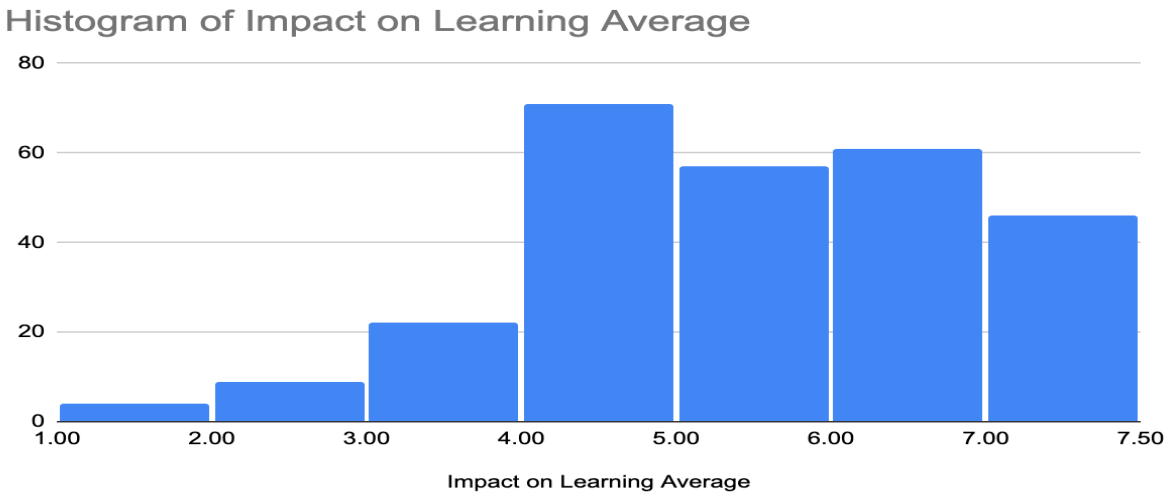
In the above histogram, we are looking at the impact of using Moodle for all 416 students who took part in the survey. Again in this construct, we can see that there is an increase in satisfaction like that of the consequences construct, when compared to the task technology fit construct. Another observation worthy of mentioning is that the decrease in dissatisfaction rate in this construct for all students, by 3%, when compared to the consequence construct for all students. 88% of the above students indicated that Moodle positively affected their academic performance with their choice of numbers 4 to 7. On the flip side, only 12% of the students indicated the opposite.

Impact - Moodle Only



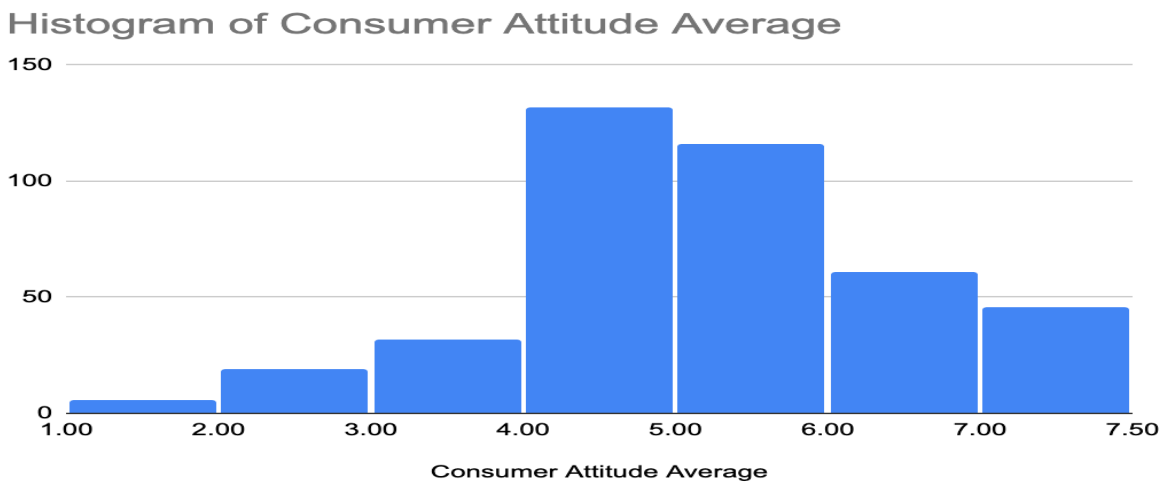
The above figure represents the impact of using Moodle only with the representation of 34% or 141 students. Again we can see a decrease in the amount of students that are less satisfied. An approximate 128 students or 91%, indicated that they are generally satisfied with the impact of using Moodle only. On the other hand 9%, or 13 students were not satisfied.

Impact - Moodle and other LMSs



In the above figure, we can see that the majority of the students again were satisfied with the impact of using Moodle and at least one other LMS with the representation of 66% or 275 students. Of this amount, 87% selected a number between 4 and 7 which is representing that they are satisfied with the impact Moodle and at least 1 other LMS had on their academic performance. The remaining 13% choose a number between 1 and 3 indicating the opposite.

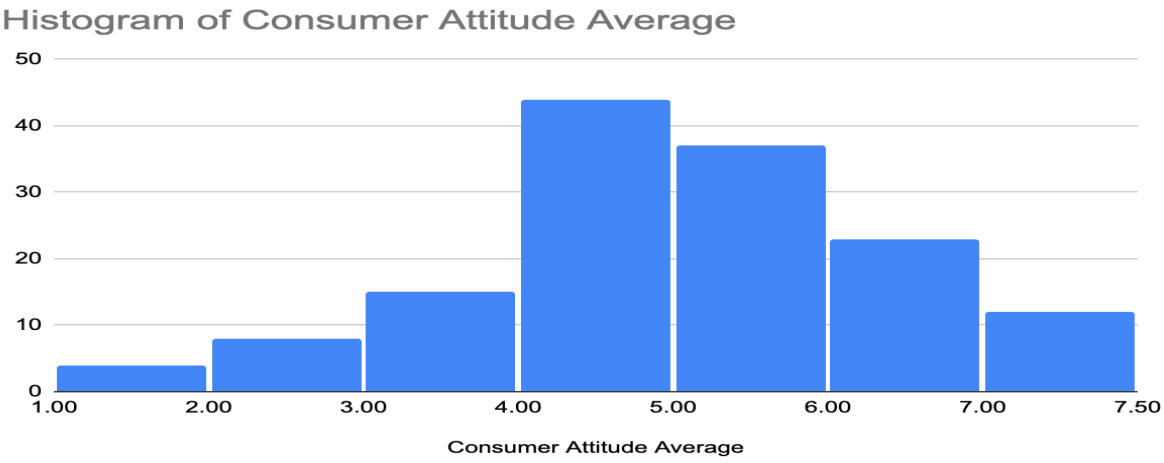
4.2.4 - Consumerization - All Respondents



Consumer attitude is the last construct and we can see a change in the shape of the histogram when we are comparing it with the 3 other constructs. While there is still a general satisfaction in the consumer attitude towards Moodle, we are seeing a slight decrease in number 6 and 7 which represents the highest levels of satisfaction. This shows a lack of enthusiasm and means perhaps, if teachers and students had the opportunity to select from a list of other LMS for their uses, they would have chose an option other than Moodle.

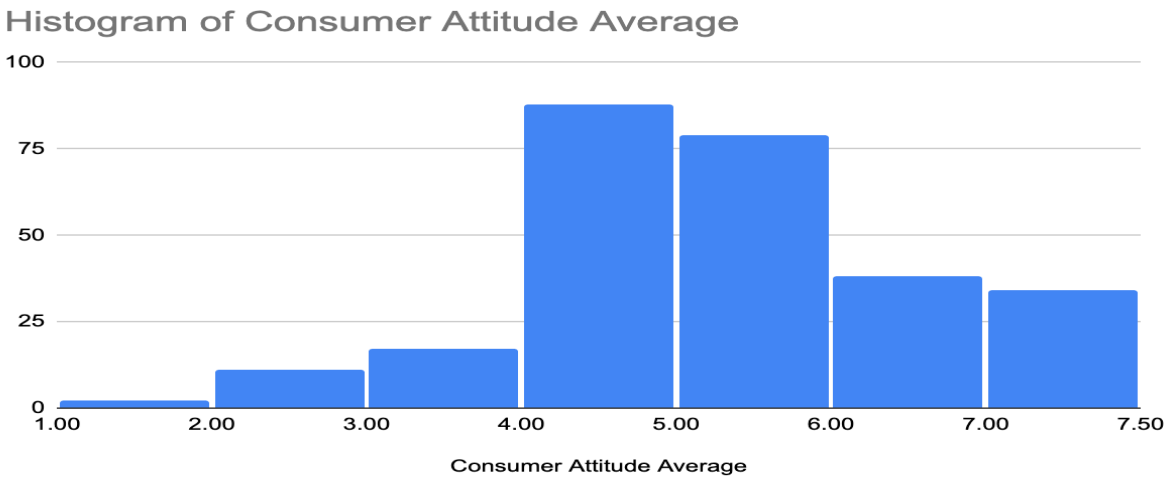
240 students, or 58% of the total amount of students selected numbers 4 to 5 which represents a majority general satisfaction. 25% or 103 students selected 6 to 7, which means that only a quarter of all the students were satisfied consumers at the highest level of satisfaction. 17% or 73 students were not satisfied consumers of Moodle.

Consumerization- Moodle Only



Following the trend, we can see that there was also a decrease in the highest levels of consumer satisfaction of numbers 6 to 7 for students who used only Moodle. 34% or 142 students represented the above histograms as consumers of Moodle only. Of this amount, 57% or 81 students chose the number 4 to 5 representing a general satisfaction as consumers. 24% or 34 students chose 6 to 7 which is the highest level of satisfaction on the scale. The final 19% or 27 students were not satisfied as consumers while using Moodle only.

Consumerization - Moodle and other LMSs



Although the majority of the students, as consumers, used Moodle and at least 1 other LMS, there was also a decrease in numbers 6 and 7 which represents the highest level of satisfaction. 66% or 274 students represented the above figure as consumers of Moodle and at least 1 other LMS. of that figure, 59% or 161 students selected 4 to 5 which means that they are generally satisfied consumers. 25% or 68 students selected 6 to 7 which represents the highest level of satisfaction on the scale. The final 16% or 30 students were not satisfied consumers with the use of Moodle and at least 1 other LMS.

In measuring the four constructs, we can see that students are more satisfied than dissatisfied with the use of Moodle.

Conclusion:

The research conducted aimed to measure the effectiveness of the University's Learning management systems to the University's students and lecturers. In order to measure the effectiveness of these LMS the researchers used a seven (7) sectioned questionnaire to collect data from both students and lecturers on their opinion of these LMS. This questionnaire considered the demographics of the participant, the teaching preference of the respondents, the usage of LMS, task technology fit, consequences expected from the usage of LMS, its impact on learning and lastly the respondent's attitude towards the usage of LMS. The results from the findings showed that the learning systems within the University of Belize are being used effectively. Students are able to use and understand how to manage these systems. For future research, researchers can spend more time proving the different hypotheses; however, despite the research being limited, students, lecturers and future researchers can utilize the research to gather more information or a better understanding of how students react or feel about the usage of different LMS to deliver course information or course work.

Limitations:

Some limitations encountered while conducting research were that researchers were not given enough time to properly develop a detailed research into the topic. All the hypotheses were not proven due to restriction of time, in addition all models were not used.

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Appendix

Background Information	Answer
Please indicate your gender:	Male ☐ Female ☐ Prefer Not to Say ☐
Please indicate your age:	16-18 ☐ 19-22 ☐ 23-25 ☐ 26-30 ☐ 31-40 ☐ >40
Student	Male ☐ Female ☐ Prefer Not Say ☐
Student-Year Mark	Year 1 ☐ Year 2 ☐ Year 3 ☐ Year 4 ☐
Please indicate your faculty:	FMSS ☐ FEA ☐ FST ☐ FNAH ☐
I took one or more online classes prior to the pandemic.	Yes ☐ No ☐
Please indicate which Learning Management Systems (LMS) your teachers at UB have used (select all that apply):	Moodle ☐ G Suite ☐ Other: (Specify)

Learning Preference	Answer
I prefer face to face classes than online classes.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
I am a more efficient student in face-to-face classes than in online classes.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
I learn more in face-to-face classes than in online classes.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
I would want to take some online courses after the University resumes face to face teaching.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
I would want to take all my courses online after the University moves back to face to face teaching.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
I would not want to take any online courses after the University moves back to face to face teaching.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree

Prior Moodle Use	Answer
Number of semesters where at least one teacher has used Moodle.	0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ >6
One or more of my teachers used Moodle to facilitate teaching face to face classes (prior to online delivery).	Yes ☐ No ☐
One or more of my teachers utilized an LMS other than Moodle.	Yes ☐ No ☐
How many semesters have you attended classes that used an LMS other than Moodle?	0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ >4 ☐
I attended classes that used an LMS other than Moodle to facilitate teaching face to face classes (prior to online delivery).	Yes ☐ No ☐
It would be beneficial to me to attend courses that use Moodle after the University returns to face-to-face teaching.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
It would be beneficial to me to attend courses that use an LMS other than Moodle after the University returns to face-to-face teaching.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree

Task Technology Fit	Answers
Moodle fits well with the way I like to study online.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Moodle is compatible with all aspects of my online study.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Moodle is easy to use.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Moodle is user friendly.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
It is easy to get Moodle to do what I want it to do.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Moodle is easy to learn.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
It is easy for me to become more skillful at using Moodle.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
New features of Moodle are easy to learn.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Do you think the output from Moodle is presented in a useful format?	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Is the information from Moodle accurate?	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree

Does Moodle provide you with up-to-date information?	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Do you get the information you need in time?	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Does Moodle provide output that seems to be just about exactly what you need?	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree

Expected Consequences of LMS Use	Answer
Using Moodle for online classes will help me to accomplish my study more quickly.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Using Moodle for online classes will improve my performance in units.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Using Moodle for online classes will increase my productivity.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Using Moodle for online classes will enhance my effectiveness in my program of study.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Using Moodle for online classes will make it easier to complete my learning tasks.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Using Moodle for online classes will give me greater control over my learning tasks.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Overall, I think that Moodle will be useful in my online studies.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Using Moodle will improve the quality of my online learning.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree

Perceive Impact on Learning	Answer
Moodle has a large positive impact on my effectiveness and productivity as a student in online classes.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
Moodle is an important and valuable aid to me in my online studies.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
I learn better online with Moodle than without it.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree

Consumerization Attitude	Answer
If my teacher could choose their own Learning Managements System, it would fit well with learning online.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
If my teacher could choose their own LMS, it would fit well with helping me to be efficient in learning online.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
If my teacher could choose their own Learning Managements System, it would be compatible with my online learning.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
If my teacher could choose their own Learning Managements System, my online learning performance would improve.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
If my teacher could choose their own Learning Managements System, my online learning productivity would improve.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree
If my teacher could choose their own Learning Managements System I would work faster while learning online.	1 ☐ Strongly Disagree 2 ☐3 ☐4 ☐ 5☐ 6☐ 7☐ Strongly Agree