The Effectiveness of Combining Google Meet and WhatsApp and Zoom and WhatsApp as Learning Management Systems at Buttonwood Bay Nazarene Primary School

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Abstract

Due to the Covid-19 pandemic, virtual learning in Belize has increased. Schools had to find ways to continuing learning at home, and this led to schools adapting different Learning Management Systems (LMS) to conduct online learning. It is important to measure the effectiveness of the adapted Learning Management Systems. This is to see how well it is working with learning and how teachers feel about these systems. This paper will evaluate the effectiveness of combining Google Meet and WhatsApp and Zoom and WhatsApp as Learning Management Systems at Buttonwood Bay Nazarene Primary School using the Task Technology Fit Model by Goodhue and Thompson. This paper will also present systematic research which investigates the effective implementation of the Learning Management Systems. A conceptual model is used to assess the success of the combination of Google Meet and WhatsApp and Zoom and WhatsApp. The measurement includes task technology fit, expected consequences of LMS use, perceived impact on teaching, and consumerization attitude. The results will give feedback about the effectiveness of these systems used as LMS and which combination was more effective.

Keywords: Task Technology Fit (TTF), Google Meet, WhatsApp, Zoom, Learning Management System (LMS)

Introduction

The school surrounding this study is a primary level institution named Buttonwood Bay Nazarene Primary School (BBNPS). Established on September 1st 1993, Buttonwood Bay Nazarene Primary School is located

in the North Side of Belize City and has an estimated student body population of 240 students. Buttonwood Bay Nazarene Primary School, like all other schools countrywide, has had to become innovative in teaching its students during the Covid-19 pandemic. With the schools' financial restraints and unpreparedness of such a pandemic occurring, management leaned towards a cost-efficient alternative that would be easily adoptable to its students and teachers alike. A tactical decision was made to utilize a combination of Google Meet, Zoom, and WhatsApp is that alternative which was decided upon as an adaptation of an LMS. Google Meet, Zoom, and WhatsApp provide free video chatting services that are accessible on the internet. This form of union where technology and organization meet is called Task Technology Fit (TTF) and this is the use of technology that is fit to complete a task (Goodhue. D & Thompson. R. 1997).

The novelty of this research encompasses the TTF Model with instruments deriving from McGill, T.J and Klobas. J.E. (2009) to evaluate the constructs of task technology fit, expected consequences, and perceived impact. It also encompasses a combination of Ifinedo. P. (2018) and Ortbact et al. (2013) for the construct consumerization attitude. This study will evaluate the effectiveness of Google Meet and WhatsApp and Zoom and WhatsApp being adopted and utilized as a learning platform to assist in the learning process at Buttonwood Bay Nazarene Primary School during the Covid-19 pandemic. It will also evaluate the added value in which this new method of learning has benefitted the Buttonwood Bay Nazarene Primary School as an organization. Additional information gained from Mrs. Bencomo, the principal at Buttonwood Bay Nazarene Primary School, reflects that an estimated 40% of the enrolled 240 students have been participating in this form of online learning while the latter of 60% remains hands-on /paper-based. Factors contributing to the low turnout rate are unknown at this time and would require further research to distinguish if lack of internet or electronic devices are major contributing factors.

Literature Review

Since the Covid-19 pandemic has started the paradigms of teaching and learning has definitely seen a drastic transformation worldwide and Belize being a developing country is no exception. The pandemic first hit Belize in March 2020 almost a year ago and as of present has closed down schools all across the country of Belize (Ministry of Health, 2021). To ensure educational learning continues a system was needed thus the use of a Learning Management System was implemented. A Learning Management System (LMS) is a software that is designed specifically to create, distribute and manage the delivery of educational content. This research will be comparing Learning Management Systems being utilized at an educational institution in Belize and its effectiveness.

Previous studies have utilized the Task Technology Fit Model to evaluate the performance of the technology being used to carry out tasks, and to measure the effectiveness of the technology to conduct assigned tasks required along with the satisfaction that it provides the individuals using it. Studies that have been conducted under this section have looked at "gaining a better understanding of how task technology fit (TTF) may affect e-learning effectiveness and satisfaction." Gu, L., & Wang, J. (2015). Others have focused on exploring "the perceptions of the fit of e-books to academic tasks and the perceived impact of the use of e-books on perceived performance." D'Ambra, J., Wilson, C. S., & Akterr, S. (2013). Tanya J. McGill, and Jane E. Klobas observed "the role of task–technology fit in LMS success, and addresses the question of how task–technology fit influences the student performance impacts of LMSs." (2009) Researchers Agung Setyawan, Nurfina Aznam, Paidi, Tyasmiarni Citrawati, and Kusdianto focused on "investigating the effect of the Google Meet media-assisted lecture method on building student knowledge and learning outcomes while learning from home". (2020)
These studies have been carried out by identifying the features of the technology and the tasks required, along with the characteristics of the individuals to apply the TTF in order to measure the effectiveness and satisfaction of learning in an e-learning environment. These studies were encountered with several limitations. For instance, the "sample size and the analysis of data since most of the data acquired needs in-depth surveys and analyses for confirmation of the findings." S.Tripathi, N. Jigeesh, (2015) In the study conducted by Chen, C. C., Wu, J., & Yang, S. C. they only observed the efficacy of text and audio in e-learning and a limitation was that "only text- and audio-based online learning systems were involved in online discussions. If video systems are introduced, more clues and richer socialization processes may be present, which may more closely mimic the natural personal interactions among the subjects." (2006)

The Task Technology Fit Model helps to quantify the effectiveness of a technology system by studying the relationship between technology and the requirements assigned to the task. In the study this theory will be used to measure the efficacy of the LMS being utilized to teach students. This model "suggests that a fit between the task, technology, and individual characteristics determines an individual's performance." Gu, L., & Wang, J. (2015) As mentioned by McGill, T.J. "In the case of student use of a LMS, task–technology fit refers to the ability of the LMS to support students in the range of learning activities they engage in, whilst accommodating the variety of student abilities." (2009) Student abilities include communicating with teacher and other students, getting the learning resources required, and the accessibility of conducting quizzes and tests. This concept will be applied to study the relationship between the technology being utilized by Buttonwood Bay Nazarene Primary School and how it helps students to carry out their online learning.

Google Meet, Zoom, and WhatsApp VS Virtual Learning

Google Meet, Zoom, and WhatsApp are adapted in virtual learning as Learning Management Systems, and these software are also cloud-based systems. McGill and Hobbs (2007) investigated the task–technology fit of virtual learning environments for their two main groups of users: instructors and students, using the virtual learning environments WebCT. They looked at student's and instructor's attitudes towards tasks–technology fit and user satisfaction of virtual learning environments. The study indicated that students had a higher task–technology fit and user satisfaction towards use and anticipated consequences of virtual learning environments than instructors. Notably, Students perceived that the virtual learning environment had a better impact on their learning than instructors. However, the instructors were unsure of the impact the virtual learning environment had on their teaching. Supporting these points is Yung-Ming Cheng (2019), stating that user satisfaction and feelings were positive, which led to student's continuance of cloud-based learning. This also led to a positive impact on their overall learning. Aznam et al. (2020) also contributed to the points of McGill and Hobbs (2007), stating that virtual learning, when the utilization was geared towards satisfying the students, had a good impact on the student's overall learning outcome. As a result, this led to high user satisfaction and task-technology fit. To add to that, Tang and Chaw (2018) stated that learning management systems provide resources for students to learn. Additionally, Google Meet, Zoom, and WhatsApp as an LMS has positive user satisfaction when it comes to the relationship between system quality and service quality, which leads to a good effect on learning effectiveness. Yadegaridehkordi et al. (2014) had similar results compared to the other related articles; this researcher expressed that the significant effect of technology-task fit on users' intention to adopt cloud-based collaborative learning technologies was considerable. Babu and Reddy (2015) also made good points to support mentioned researchers' claims. The researchers mentioned that in developing countries, e-learning using systems such as Google Meet, Zoom, and WhatsApp can provide opportunities for these countries. These researchers stated that some opportunities are an enhancement in the education system of students enrolled, economic growth, and it develops human resources. These opportunities can lead to users being satisfied with e-learning opportunities, and they can contribute to the success of the country.

Aznam et al. (2020) and McGill and Hobbs (2007) both acknowledged instructors in their research, however, the responses from the instructors differed. Aznam et al. (2020) stated that the negative impact of learning virtually was the fact that the presence of educators directly cannot be replaced by anything in the formation of student character, but overall, the learning was effective, so task-technology fit was average. McGill and Hobbs (2007) expressed that instructors are still unsure about the contribution of virtual learning to their teaching, but the high level of support was acknowledged. Therefore, this led to their perception of task-technology fit being low. Researchers such as Yung-Ming Cheng and Yadegaridehkordi et al. did not consider instructors in their research, it was solely based on students. Additionally, Aznam et al, McGill and Hobbs, Yung-Ming Cheng, and Yadegaridehkordi et al. did not address developing countries in their research either. This is what made researcher Alam et al. (2018) differ from the rest. The researcher investigated the readiness of schools to implement information system strategic planning (ISSP) as a way to achieve organizational goals. This research concluded that the most dominant factors to measure the readiness in implementing information system strategic planning are process and technology, but it is important to note that some research articles do not include the people factor as the influencing factor for the implementation of information system strategic planning.

To continue, Shailja and Jigeesh (2015) study are quite similar, they investigated the performance impact of cloud technology in an organization by applying the technology performance chain model (a combination task technology fit and utilization models). This study was conducted through a survey among four multinational corporations and the results showed support of the technology performance chain model in assessing individual performance by evaluating different factors of task technology fit and utilization. Moreover, all the firms agreed that the use of cloud computing can increase the effectiveness of performing job tasks. The difference in this study is that cloud technology was primarily meant to be researched for a business environment; however, it can still be applied to an educational organization. Sun and Wang (2015) research also support this outcome since they highlighted that students perceive and prefer the fit between learning tasks and e-learning tools. Their findings also yield helpful insights on the best practices concerning the utilization of information technology for the enhancement of student learning outcomes in online course design. Sun and Wang study state that the utilization of e learning/ cloud-based tools is the best fit for students. Chen, Wu, and Yang's (2005) study also show similarities in that their research investigated the impact of online synchronous audio and video systems on the performance of cooperative learning in decision making and intellective tasks. Furthermore, they looked at how the learner's attitude toward the synchronous learning system significantly affects the satisfaction of synchronous online cooperative learning. Although most of the articles had some similarities among them, there are also some differences between them as well. As mentioned, Shailja and Jigeesh study differed since they were based for a working environment and conducted using multinational businesses rather than schools and students. Sun and Wangs' study differ because it is based on the premise of media synchronicity theory along with task technology fit theory. The difference in Cheng, Wu, and Yang's study is that it uses online synchronous audio and video systems to test the performance of cooperative learning in decision making and intellective tasks. Furthermore, it focuses on the ability to make decisions and carry out tasks.

Methodology

Google Meet, Zoom, and WhatsApp are cloud-based systems that are all used as Learning Management Systems. These systems are aided in online learning and distance learning for students. Online learning is defined as learning that takes place over the internet, and distance learning is defined as an expanding environment, which allows users to be flexible when operating outside of the constraints of time and place. (Gilbert, 2015). The rate of online learning has increased in Belize due to the COVID-19 pandemic, however, it has grown to be very appealing to learners. This study measures the success and effectiveness of learning using Google Meet and WhatsApp and Zoom and WhatsApp.

Participants:

The participants in this study consisted of the ten teachers at Buttonwood Bay Nazarene Primary School. There were two separate questionnaires that were handed out to them. The first survey was for the four teachers who used Google Meet and WhatsApp, and the second survey was distributed to the six teachers who used Zoom and WhatsApp.

Procedure

The survey was carried out mid semester on the teachers of Buttonwood Bay Nazarene Primary School. Teachers were requested to fill a questionnaire in order to gather information on their perceptions of Zoom and WhatsApp or Google Meet and WhatsApp. The questionnaires were distributed via WhatsApp to the principal who forwarded it to the teachers depending on the information systems they use to deliver classes to students. The message presented a google form document which allowed teachers to respond to the questions; furthermore, all responses were voluntary and kept confidential.

Measurement

To collect accurate data from participants, one standard measurement was used throughout the entire instrument. The measurement scales used in the process of data collection were obtained from previously verified instruments that were provided as samples. Throughout the instrument, a 7-point Likert scale labeled from 'strongly disagree' to 'strongly agree' was used to indicate whether the participant agreed with

the statements provided (McGill, 2009). Modifications were done throughout the questionnaire to cater to the primary school. The questionnaire consisted of seven sections.

Section one addressed gender, age, the highest level of education, grade taught, and LMS used. Respondents were given options or to state an answer. Section two contained six questions focused on teaching preferences, and all questions used the 7-point Likert scale. This section mentioned preference of online teaching or face-to-face, the method of teaching that is more effective to the respondent, the method where students learned more, and whether the respondents want to teach some online classes, all online classes, or no online classes when school returns to normal. Section three addresses prior Learning Management Systems use and consisted of seven questions using nominal and ordinal scales of measurements. A combination of multiple choice and 7-point Likert scale ranging from strongly disagree being 1 and strongly agree being 7 were used.

Section four of both questionnaires observed the task technology fit of the LMS that the teachers at Buttonwood Bay Nazarene Primary School utilize. Both questionnaires asked about how helpful the LMS is to teach online classes, if the LMS is user friendly, and how it improves their teaching skills. Section five addresses expected consequences of Learning Management System use and consisted of eight questions that were measured using a 7-point Likert Scale ranging from strongly disagree being 1 and strongly agree being 7. The sixth section of both questionnaires asked about the perceived impact on teaching that the teacher has noticed while using an LMS. The seventh section of both questionnaires focused on consumerization attitude. This section asked questions to the teachers about how their performance may differ from now if they had the option to choose an LMS of their preference. One questionnaire was based on the impact that teachers using Zoom and WhatsApp have noticed on their teaching skills, productivity, efficiency and the value that these tools provide to the teachers. On the other questionnaire, it focused on the same concept, but questioned teachers using Google Meet and WhatsApp.

Data Analysis and Discussion

The results from the data that was collected will be represented in histograms based on the four constructs; task technology fit, expected consequences, perceived impact, and consumerization attitude. All four constructs reflect responsiveness at Buttonwood Bay Nazarene Primary School (BBNPS) that is utilizing both Zoom and WhatsApp and Google Meet and WhatsApp as an adaptation of a Learning Management System (LMS) and its effectiveness. Two groups were formed among the 10 participants (teachers) with Group A representing six participants that are utilizing Zoom and WhatsApp and Group B representing four participants that are utilizing Google Meet and WhatsApp as their method of teaching online. The two groups were surveyed separately and therefore the data analysis being presented was prepared in that manner.

Characteristics of Respondents (Zoom and WhatsApp)

Characteristics	***Number***	***Percentage***
Gender		
Female	6	100%
Male	0	0%

Age		
20-30	2	33%
31-40	4	67%
41-50	1	0%
51-60	0	0%
>60	0	0%
Degree		
Associates	3	50%
Bachelors	3	50%
Masters	0	0%
PhD	0	0%
MD	0	0%
Grade		
Infant	2	33%
Standard	3	50%
Other	1	17%

Characteristics of Respondents (Google Meet and WhatsApp)

Characteristics	***Number***	***Percentage***
Gender		
Female	4	100%
Age		
20-30	0	0%
31-40	3	75%
41-50	1	25%
51-60	0	0%
>60	0	0%
Degree		
Associates	0	0%
Bachelors	4	100%
Masters	0	0%
PhD	0	0%

MD	0	0%
Grade		
Infant	0	0%
Standard	4	100%
Other	0	0%

Task Technology Fit

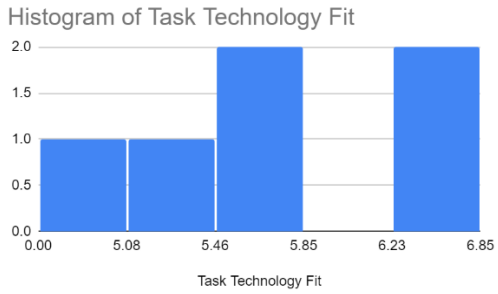
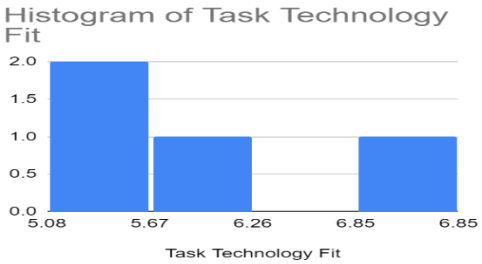


Figure 1.1



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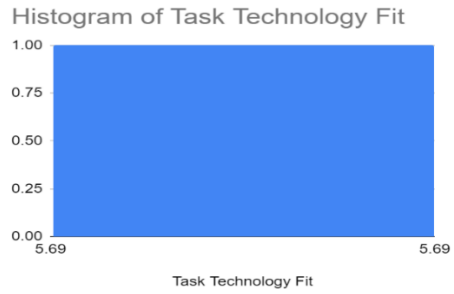

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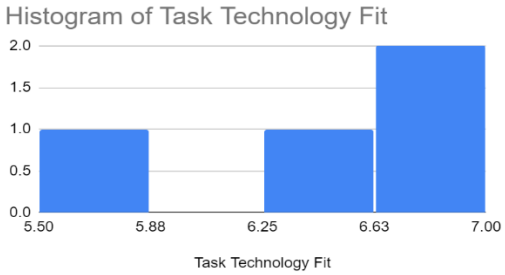
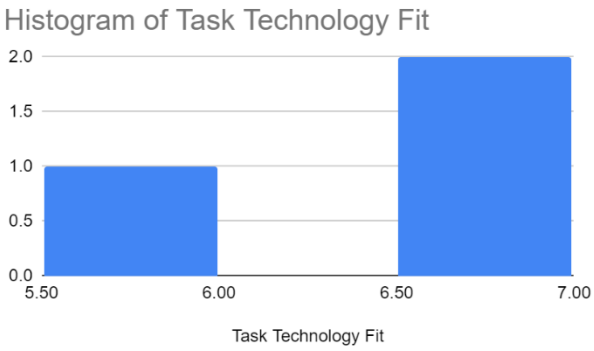


Figure 1.4



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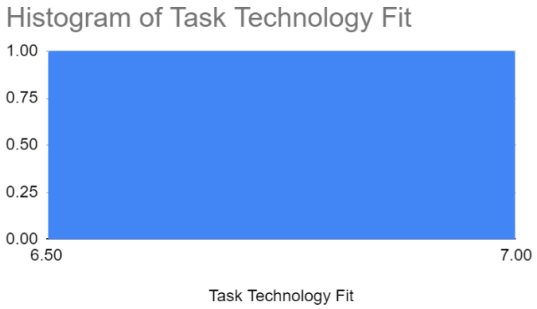


Figure 1.6

Group A - Zoom and WhatsApp

Figures 1.1 – 1.3 reflects the responsiveness of TTF at BBNPS that is utilizing Zoom and WhatsApp as an adaptation of a LMS and its effectiveness. In Figure 1.1 a variance of 5 participants agreeing to LMS effectiveness with a range of 5.8 to 6.85 and 1 participant non responsive. In addition, Figure 1.2 reflects a variance of 4 participants that have not utilized an LMS other than Zoom and WhatsApp to facilitate teaching during face-to-face classes, 1 participant did not respond and in Figure 1.3 only 1 participant has previously utilized an LMS other than Zoom and WhatsApp. In conclusion, TTF at BBNPS adaptation of an LMS being utilized is moderately successful and was affected by the 1 participant that was non responsive to the construct in entirety.

Group B - Google Meet and WhatsApp

Figure 1.4 – 1.6 reflects the responsiveness of TTF at BBNPS that is utilizing Google Meet and WhatsApp as an adaptation of a LMS and its effectiveness. In Figure 1.4 there was no variance, all 4 participants agreed to LMS effectiveness with a range of 5.85 to 6.77. In addition, 3 participants have not utilized an LMS other than Zoom and WhatsApp to facilitate teaching during face-to-face classes and 1 participant did. In conclusion, it is fair to say that this adaptation of LMS is successfully being utilized at BBNPS.

Expected Consequences of LMS Use

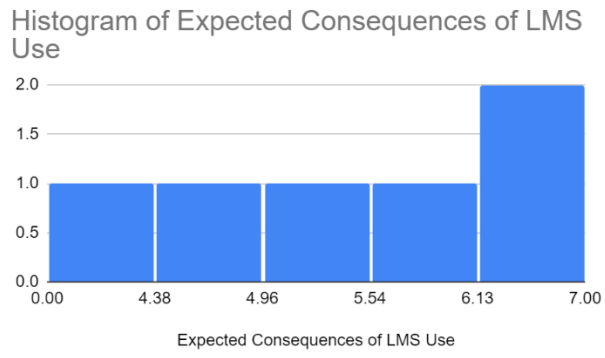
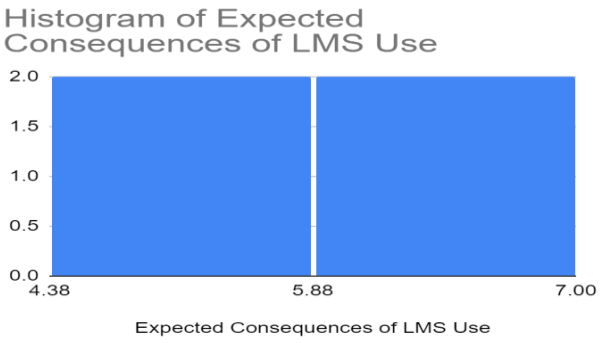


Figure 2.1



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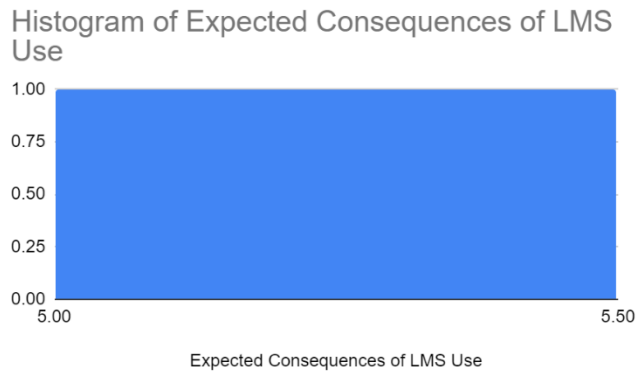

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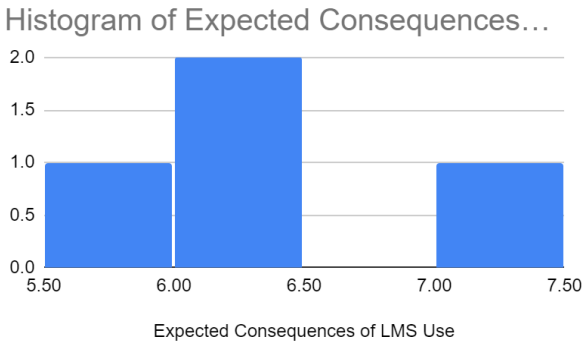

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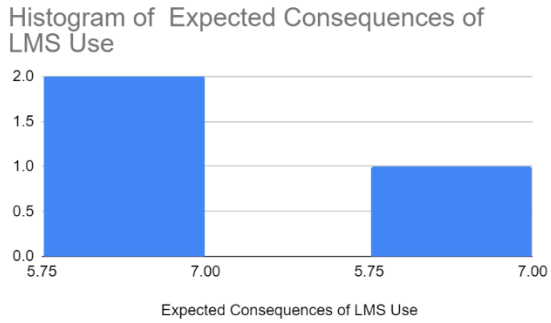

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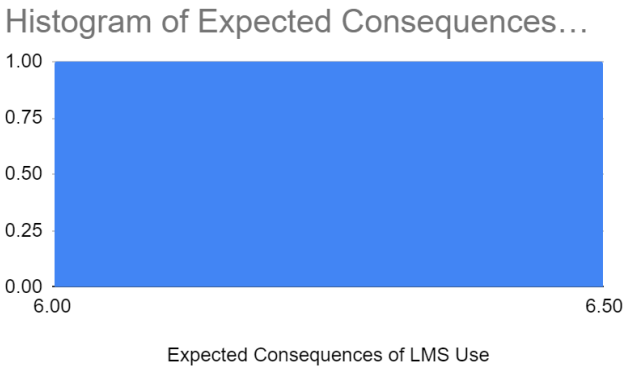


Figure 2.6

Figures 2.1 - 2.6 represents the responsiveness of the expected consequences of LMS use at Buttonwood Bay Nazarene Primary School that is utilizing both Zoom and WhatsApp and Google Meet and WhatsApp as an adaptation of a Learning Management System (LMS) and its effectiveness.

Group A - Zoom and WhatsApp

Figures 2.1 - 2.3 shows the responsiveness of expected consequences of LMS use at BBNPS of teachers that use Zoom and WhatsApp as their LMS. Under Figure 2.1, which is the overall view of Expected Consequences of LMS Use, shows that the majority of the participants have a neutral opinion towards the outcome that they get from using Zoom and WhatsApp. The highest ratings are above the average of 6.13, while the others were below this range with the lowest being under 4.38. For participants that only use Zoom and WhatsApp, 2 replies ranged between 4.38 and 5.88, and the other 2 ranged between 5.88 to 7. This means that these participants think that Zoom and WhatsApp is a good LMS for teaching. For participants that use other than Zoom and WhatsApp, only 1 responded at an average between 5-5.88. From this, it can be gathered that this person considers that the same teaching outcome can be found in another LMS. From these responses it can be concluded that the majority of participants that use Zoom and WhatsApp notice that it is good enough to improve their ability to teach online classes.

Group B - Google Meet and WhatsApp

Figures 2.4 - 2.6 shows the responsiveness of expected consequences of LMS use at BBNPS of teachers that use Google Meet and WhatsApp as their LMS. Figure 2.4 shows that most of the participants think of Google Meet and WhatsApp to provide good results when using it as an LMS. Under the part of only participants that use Google Meet and WhatsApp, all participants replied between the average of 5.75 to 7, which means

that Google Meet and WhatsApp is a very good LMS for them to deliver online classes. For participants that use other than Google Meet and WhatsApp, their average response was above 6. Therefore, shows that this participant considers that better teaching results can be found in other LMS besides Google Meet and WhatsApp.

Perceived Impact on Teaching

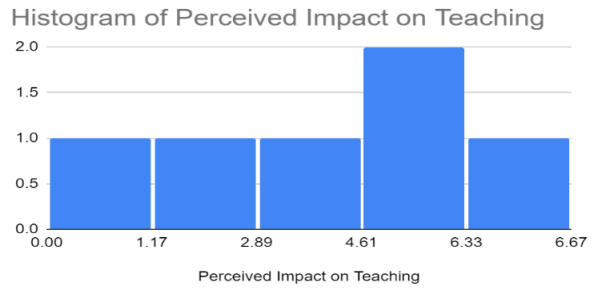
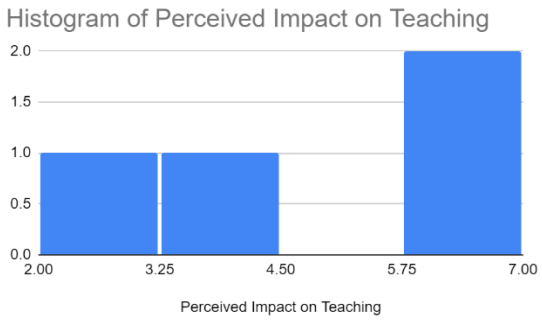


Figure 3.1



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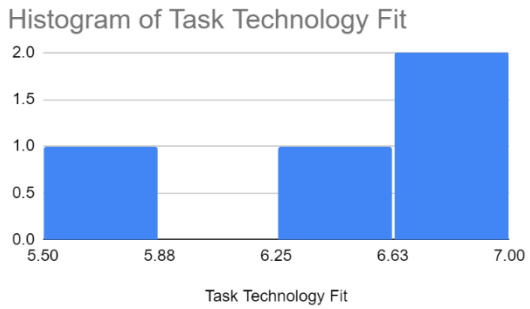

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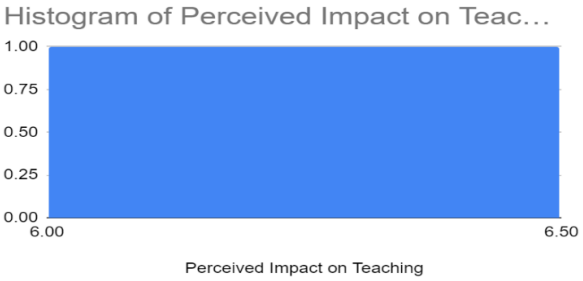
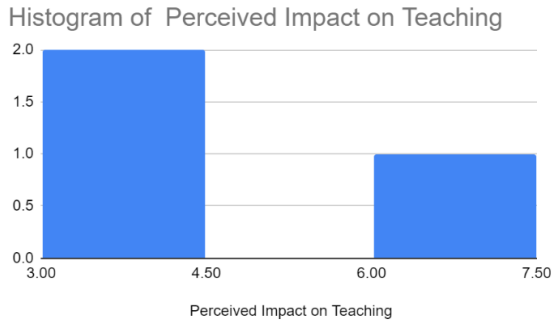


Figure 3.4



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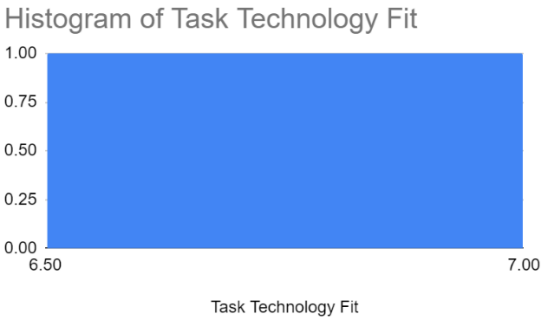

Figure 3.6

Figures 3.1-3.6 represents the responsiveness of the perceived impact on teaching at Buttonwood Bay Nazarene Primary School (BNPS) that is utilizing both Zoom and WhatsApp and Google Meet and WhatsApp as an adaptation of a Learning Management System (LMS) and its effectiveness.

Group A - Zoom and WhatsApp

Figure 3.1 shows three individuals who rated the perceived impact on teaching 0-3 and the other three who rated it a 5-6. Half disagreed, and the other half agreed. 50% were not satisfied with the perceived impact

meaning they did not think that it was effective, while the others felt like it was effective. Overall, this means that the perceived impact on teaching was moderately successful. Figure 3.2 shows those who only used Zoom and WhatsApp for their teaching and those who disagreed with the overall perceived impact were a part of this group, while the others who used other LMS than Zoom and WhatsApp agreed with the perceived impact on teaching. It can be said that using other LMS determined how well you agreed or disagreed with the overall perceived impact on teaching.

Group B - Google Meet and WhatsApp

Figure 3.4 shows that two respondents rated the perceived impact on teaching between 3-4 disagreeing and the other two rated it between 6-7 being strongly agreeing. This means that from the 40% of teachers who used Google Meet and WhatsApp, half did not believe that those LMS had a positive and effective impact on their teaching, while the other half agreed stating that the impact was positive and effective. This means that the perceived impact on teaching was partially successful with their teaching. Figures 3.5 represents three respondents who only used Google Meet and WhatsApp. Majority of those who only used those LMS were not satisfied with the perceived impact on teaching. Figure 3.6 represents the respondent who used other LMS than Google Meet and WhatsApp. This person was very satisfied, so it can be expressed that using other LMS helped shape the rating the perceived impact on teaching had.

Consumerization Attitude

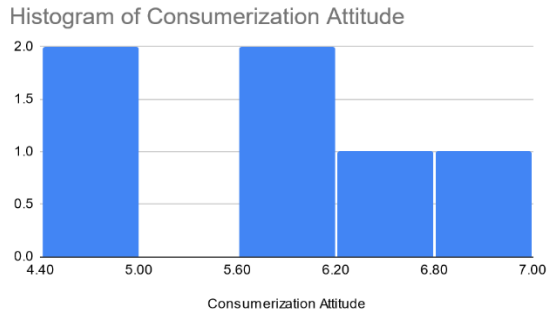

Figure 4.1

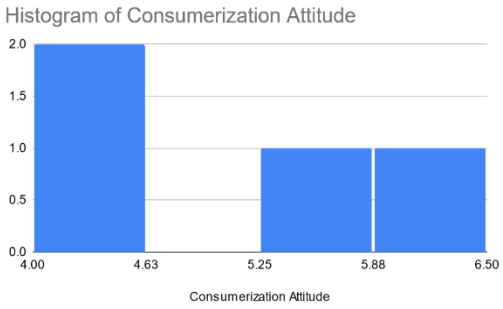

Figure 4.2

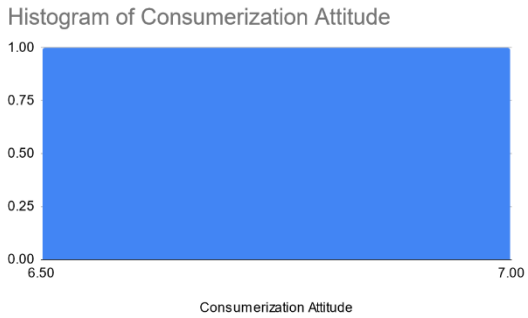

Figure 4.3

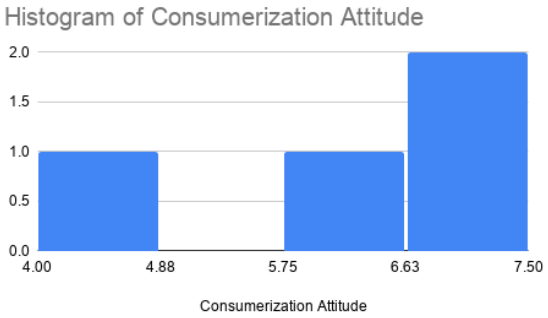

Figure 4.4

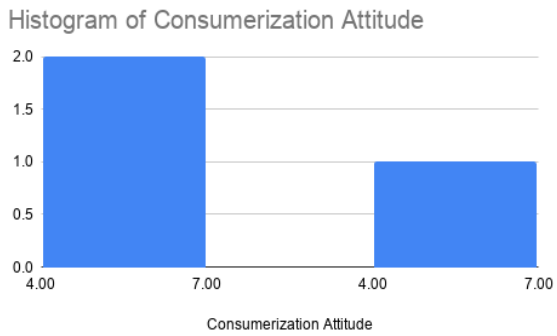

Figure 4.5

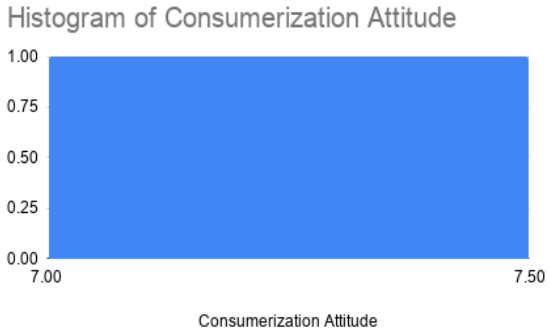

Figure 4.6

Figures 4.1 to 4.6 illustrate the responsiveness of consumerization attitude at Buttonwood Bay Nazarene Primary School that is employing the use of Google Meet and WhatsApp and Zoom and WhatsApp as an adaption of a Learning Management System and its effectiveness.

Group A - Zoom and WhatsApp

Figure 4.1 displays that 2 participants rated consumerization attitude 4 – 5 while the remaining 4 participants rated it from 6 – 7. This demonstrates that more than half of the participants strongly agreed and were very satisfied with consumerization attitudes; thus, it can be said that consumerization attitudes proved to be successful. To continue, figure 4.2 shows that 4 participants only use Zoom and WhatsApp for teaching which reveals those who do agree with the consumerization attitude. Figure 4.3 reveals that 1 participant has used an LMS other than Zoom and WhatsApp which shows that they agree with the consumerization attitude.

Group B - Google Meet and WhatsApp

Figure 4.4 depicts that 1 participant rated consumer attitude 4 – 5 while 3 participants rated it from 6 – 7. This describes that 75% of the participants strongly agreed and were very satisfied with consumerization attitude and the perceived fit and expected performance improvement. Figure 4.5 illustrates that three participants use only Google Meet and WhatsApp. Two of the participants did not agree with the consumerization attitude. Figure 4.6 reveals that one participant uses an LMS other than Google Meet and WhatsApp for teaching and strongly agrees with its use.

Overall

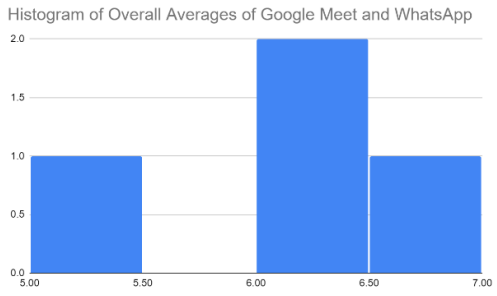

Figure 5

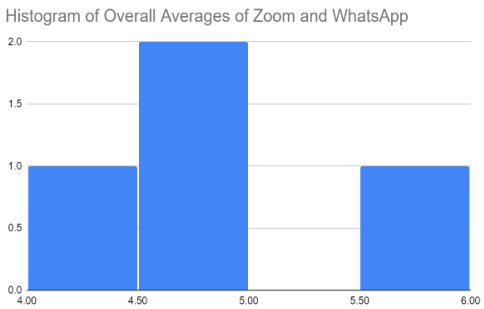

Figure 6

When comparing overall averages of Zoom and WhatsApp and Google Meet and WhatsApp, respondents were satisfied with the combination of Google Meet and WhatsApp in all aspects. Figure 5 shows that the averages ranged from 5-7 for Google Meet and WhatsApp, and figure 6 showed that the averages for Zoom

and WhatsApp ranged from 4-6. It can be said that the teachers who used Google Meet and WhatsApp were more effective with the utilization of these systems.

Conclusion

While there is no doubt that COVID-19 has caused significant stress and uncertainty in every individual around the world, at the same time it is important to find some type of positivity in these times. From the information gathered in this study, it can be agreed that Zoom, Google Meet, WhatsApp, and other LMS have been of great support for instructors and students that have had to adapt to the online environment. In this study, it was decided to research Buttonwood Bay Nazarene Primary School and their online method of teaching which included applications like Zoom, WhatsApp, and Google Meet. Two questionnaires were issued to gather the information needed to conduct the research since the teachers at this school were not instructed to utilize a specific LMS, one questionnaire focused on participants that taught with Zoom and WhatsApp and the other with Google Meet and WhatsApp. The result of both questionnaires concluded that the LMS that best fits for teachers at Buttonwood Bay Nazarene Primary School is Google Meet and WhatsApp. This study will contribute to the vast, but never-ending research of Task Technology Fit, in this case, observing if the LMS used by primary school's helps teachers perform better when teaching online classes. Limitations faced in this study include the sample size of the school since it is very small to generalize, and another limitation would be incomplete data received from the questionnaires. Lastly, recommendations for future research would be to try to gather information from a bigger institution, so that the perspective of larger sample size can be analyzed.

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Appendix

Task Technology Fit (Google Meet and WhatsApp) - Teachers (Buttonwood Bay Nazarene Primary School)

MIS Research - Task Technology Fit (TTF) - Lecturers Perceptions of Learning Management Systems (LMS)

Background Information

You are invited to participate in a research study being conducted by our group, enrolled in the Faculty of Management and Social science at the University of Belize for the Management Information Systems course. The questionnaire will take approximately 10 to 15 minutes. Your participation is voluntary and you may decline to answer any question. Also, you hold the right to withdraw from participating at any time. There are no risks for participating in this research. In addition, participants will remain anonymous. Confidentiality will be maintained at all times. If you have any questions about the study, feel free to contact the researchers. Thank you for your participation and time.

TTF

Buttonwood Bay Nazarene Primary School

Management Information Systems Research

Please complete this form to gather empirical evidence of your perceptions of Google Meet, Zoom, WhatsApp etc.

1. Please indicate your gender:

Mark only one oval.

- Female
- Male
- Prefer not to say

2. Please indicate your age range:

Mark only one oval.

- 20-30
- 31-40
- 41-50
- 51-60
- >60

3. Please indicate your highest degree attained:

Mark only one oval.

- Associates
- Bachelor's
- Masters
- PhD
- MD
- Other: ________

4. Please indicate the grade you are teaching:

Mark only one oval.

- Infant
- Standard
- Other

5. Please indicate which Learning Management System (LMS) you have used:

Check all that apply.

- Google Meet
- Google Classroom
- Zoom
- WhatsApp
- Other: ________

Teaching Preferences

On a scale of 1 to 7 with 1 representing strongly disagree and 7 being strongly agree, kindly indicate your response.

6. I prefer teaching face to face rather than online.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree

7. I am more effective teaching face to face than online.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree

8. Students learn more in my face to face classes than online.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree

9. I would want to teach some online classes after the primary school resumes face to face teaching.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree

10. I would want to teach all my classes online after the primary school moves back to face to face teaching.

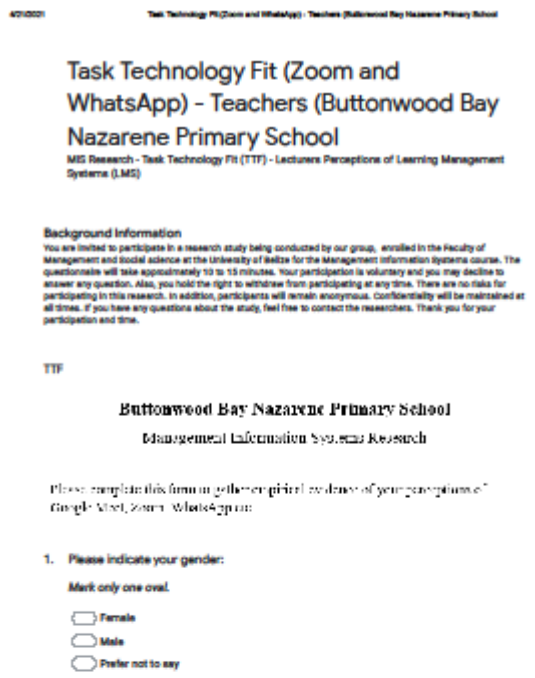
Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree

11. I would NOT want to teach any online classes after the primary school moves back to face to face teaching.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree



4/21/2021 Task Technology Fit(Zoom and WhatsApp) - Teachers (Buttonwood Bay Nazarene Primary School

Task Technology Fit (Zoom and WhatsApp) - Teachers (Buttonwood Bay Nazarene Primary School

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TTF

Buttonwood Bay Nazarene Primary School

Management Information Systems Research

Please complete this form to gather empirical evidence of your perceptions of Google Meet, Zoom, WhatsApp use.

1. Please indicate your gender:

Mark only one oval.

- Female
- Male
- Prefer not to say

4/21/2021 Task Technology Fit(Zoom and WhatsApp) - Teachers (Buttonwood Bay Nazarene Primary School

2. Please indicate your age range:

Mark only one oval.

- 20-30
- 31-40
- 41-50
- 51-60
- >60

3. Please indicate your highest degree attained:

Mark only one oval.

- Associates
- Bachelor's
- Masters
- PhD
- MD
- Other: _____

4. Please indicate the grade you are teaching:

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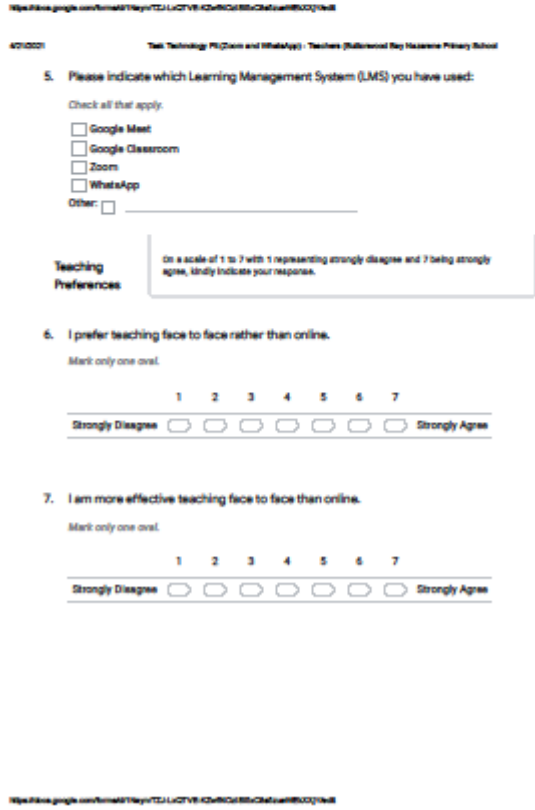
- Infant
- Standard
- Other



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- Google Classroom
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- WhatsApp
- Other: _____

Teaching Preferences

On a scale of 1 to 7 with 1 representing strongly disagree and 7 being strongly agree, kindly indicate your response.

6. I prefer teaching face to face rather than online.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree

7. I am more effective teaching face to face than online.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree

4/21/2021 Task Technology Fit(Zoom and WhatsApp) - Teachers (Buttonwood Bay Nazarene Primary School

8. Students learn more in my face to face classes than online.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree

9. I would want to teach some online classes after the primary school resumes face to face teaching.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree

10. I would want to teach all my classes online after the primary school moves back to face to face teaching.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree

11. I would NOT want to teach any online classes after the primary school moves back to face to face teaching.

Mark only one oval.

	1	2	3	4	5	6	7	
Strongly Disagree	◯	◯	◯	◯	◯	◯	◯	Strongly Agree