The Adoption of Online Learning during the Pandemic: Issues, Challenges, and Future Directions

KINGIE G. MICABALO

https://orcid.org/0000-0003-4179-2086 kmicabalo@uc.edu.ph Business and Accountancy University of Cebu Cebu City, Philippines

WINNIE MARIE T. POLIQUIT

https://orcid.org/0000-0002-6839-5614 einniwpol@gmail.com Business and Accountancy University of Cebu – Cebu City, Philippines

ESTELA V. IBANEZ

http://orcid.org/0000-0002-9697-3397 estelaibanez@llcc.edu.ph College of Technology Lapu-Lapu City College, Lapu-Lapu City, Philippines

ROBERT B. PABILLARAN

http://orcid.org/0000-0001-7606-990X robert_pabillaran@yahoo.com College of Technology Lapu-Lapu City College, Lapu-Lapu City, Philippines

CARLA A. MALAIT

http://orcid.org/0000-0003-0872-2094 carlamalait@gmail.com College of Technology Lapu-Lapu City College, Lapu-Lapu City, Philippines

JESSZON B. CANO

https://orcid.org/0000-0001-7071-033X jesszon.cano@bisu.edu.ph Hospitality Management Bohol Island State University – Candijay

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ABSTRACT

The Covid19 Pandemic has shifted the entire momentum of the traditional education processes into an environment where students experience difficulties in the E-Learning program. This study determines the challenges encountered in the duration of the E-learning and its' effect on students' perceived learning and satisfaction during the Pandemic. The investigation study formulated an aggregate of 313 respondents on a snowball inspecting strategy. Frequency and simple percentage, weighted mean, Chi-Square Test of Independence, and Oneway ANOVA were used to treat and interpret the data. The findings revealed that the students encountered difficulties through course quality, peer interactions, learning diversification, user-friendliness, and course design. Additionally, it was revealed that how they perceived these difficulties affects their perceived learning and satisfaction in the E-learning process. It was found out also that a higher level of challenges would associate with dissatisfaction and lower student perception in education. The study concluded that E-learning is a platform that should be present in the teaching and learning modalities in all institutions regardless of the situation. Additionally, the course quality, peer interactions, learning diversification, user-friendliness of the process, and its course contribute to increasing the student's perceived satisfaction in E-learning. Generally, the impact of the Covid 19 pandemic provides a manifestation that to improve student perceived learning and satisfaction; there is a need to intensify the execution in the administration, teachers, and the learning management systems used in a Higher Education Institution.

Keywords — Education, E-Learning process, student learning and satisfaction, non-experimental descriptive correlational, Mandaue City, Philippines

INTRODUCTION

The COVID19 Pandemic has upset different Higher Education Institutions across the world. During the Pandemic, the shift towards online schooling has driven numerous investigations on apparent learning results and understudy fulfillment in this new learning climate (Baber, 2020). It had a profound impact on people's lives all across the world, particularly in the realm of education. The availability of remote learning provides a community-wide option in reducing the effects of outbreaks. This option shifts the focus of physical education to online and virtual learning (Pratama et al., 2020).

Since the introduction of the COVID-19 virus, the overall method of learning at educational institutions in South Korea and Malaysia, Brunei, Cambodia, and around the world has changed (Choi et al., 2021). As the virus spreads, educational sectors in all countries are compelled to adapt and reconfigure their compositions and methods. The amount of pleasure, success, and quality of online learning programs among students during the COVID-19 epidemic is a source of concern, and online learning is expected to become a reality, according to several Asian researchers. Regardless of the class type adopted, a blended education should be regarded to enhance learning in which contact between lecturers and students remains a critical aspect for success (Choi et al., 2021)

Additionally, the overall challenges faced by students in online learning were high. Therefore, a strategy must need to be considered before the educators or lecturers conduct online education. All students need to continue the teaching that the lecturers are working on without having any dropout. The management of the College needs to enhance the existing infrastructure and internet capability of each department, which will increase the likelihood of effective use of e-learning among the students (Wan Hassan et al., 2020).

With this severe issue concerning Covid 19 Pandemic, students in the Philippines encountered some challenges in coping with the new normal of learning and teaching. Challenges emerge, such as mental health issues (anxiety and stress), unreliable internet connections, slow e-learning platforms and services, a lack of information and communication technology skills, poor time management skills, and distractions (Jaradat & Ajlouni, 2021).

Furthermore, students encountered difficulties during the epidemic, but teachers also faced challenges in planning, implementing, and evaluating online learning. The biggest problems that students experience in online learning during the Covid-19 Pandemic are technological (Jhon et al., 2020).

At the onset of the Pandemic, E-learning is very vital for the continuous learning of the students at home. In connection, a gap was identified, in particular for the Business and Accountancy students. They struggle to transition from the face-to-face modality of teaching to the concept of E-learning, experiencing the mentioned challenges. Moreover, the administration, teachers, and learning management system users are also a factor in establishing the efficiency and effectiveness of E-learning. As the understudies face these varied concerns, the department also struggles to realign specific techniques and methodologies to reach out to students' concerns and realize higher enrolment rates.

With the presented issues, concerns, and situation, the faculty members of the department handling business management and economics subjects and faculty researchers intend to propose practical measures towards evidence that will provide recommendations as to the sustainability of the performance of the administration, teachers, and the learning management system used to enhances students perceived satisfaction and learning during the Covid 19 Pandemic.

FRAMEWORK

This study is anchored on Connectivism Theory, a moderately new learning hypothesis created and dependent on the possibility that individuals cycle data by framing associations. This hypothesis has been created with the computerized and innovation age, adjusting to progress in these fields. This new hypothesis proposes that individuals presently do not quit learning after proper training and keep picking up information from different roads, such as work abilities, systems administration, experience, and admittance to data with new instruments in innovation (Siemens, 2005). Connectivism is a learning hypothesis that clarifies how Internet progressions have made new open entryways for individuals to learn and share data across the World Wide Web. These headways consolidate Web programs, email, wikis, online discussion social events, relational associations, YouTube, and different instruments that engage them to learn and grant information to other people. An essential component of connectivism is that much learning can happen across peer networks on the Web. In connectivist education, a teacher will oversee understudies to information and answer basic requests differing, to help understudies learning and sharing. Understudies are additionally asked to look out for information freely on the Web and express what they find. A related organization around this shared information often results. The massive open online course (MOOC) marvel comes from the connectivity hypothesis. In a connectivist MOOC (cMOOC), it is available to any individual who needs to enlist. It utilizes open programming and frameworks across the Web to encourage learning and sharing. It happens fundamentally on the Web. It occurs as indicated by a predefined educational plan for an assigned timeframe. While facilitators manage the cMOOC, its members are primarily liable for what they realize and how they share it; this associated conduct generally makes the course content (Downes, 2010).

Frameworks Theory of Mead (2019) further backs the assessment. It is an interdisciplinary examination of structures with a blend of interrelated and related parts that are ordinary or human-made. Each system is depicted by its spatial and common cutoff points, encompassed and influenced by its present condition, portrayed by its structure and reason or nature, and conveyed in its working. A framework can be more than the number of its parts if it communicates collective energy or rising conduct regarding its belongings. Changing one bit of the system impacts various components and the whole structure with alleged conduct when in doubt. For self-learning and self-changing systems, the positive turn of events and change depends on how well the design changes with its present situation. A few systems work principally to help various structures by supporting the other structure's upkeep to prevent disappointment. Systems theory's objective is to methodically find a system's dynamics, limitations, and conditions and explain standards (reason, measure, techniques, instruments) that can be recognized and applied to frameworks at each degree of settling. Structures change has emerged as a standard packaging through which state and public funders and experts across various fields approach a person's work. In the more significant part of these endeavors, change specialists and researchers endeavor to move human administrations and network frameworks to make better and more results and improve the business as usual. Despite this, researchers, experts, and funders can attract a lack of structures to help them agree, plan, and survey this cycle from a fundamental point of view. The proposed examination of Foster et al. (2007) highlights the noteworthiness of dealing with the significant and apparent structures inside a system, similarly to the joint efforts and interdependencies among these structural parts. It fuses dealing with the dominating normalizing, resource, regulative, and operational credits that immediate the lead and experiences of system people.

Program Hypothesis further sponsorship the examination, which gives an away from how change occurs and how to develop execution further. The Program Theory advises the ideal approach to make, address, and use program speculation pleasantly and purposely to suit a particular condition. The

necessities examination to intercession plan, from utilization to results evaluation, procedure enumerating to technique execution and appraisal, is imperative for program speculation (Funnell & Rogers, 2011). Program speculation is that many express certain doubts about what movement is expected to address the social, enlightening, or ailment and why the troublesome will respond to this action (Chen, 2012). Program Hypothesis is not just to consider whether an intercession works or does not work, yet how and why it does. The data is essential for associates to work on their current or future endeavors (Chen, 2012). Program hypothesis is a purposeful approach of assistants' prescriptive suppositions and captivating questions disguised endeavors, regardless of whether express or particular. Spellbinding suppositions are called the change model to manage causal cycles to accomplish program complaints. Prescriptive inquiries, called the action model, direct what moves should be made in a program to carry out captivating enhancements. Program theory uses events and change models to address relevant factors and arranging, and execution gives hugely enchanted aides (Donaldson, 2012).

OBJECTIVES OF THE STUDY

This study investigates and determines the difficulties encountered in the duration of the E-learning and its effect on students' perceived learning and satisfaction during the Pandemic of COVID 19. Furthermore, this study will present, from students' perspective, evidence that will provide recommendations as to the sustainability of the performance of the administration, teachers, and the learning management system used.

METHODOLOGY

Research Design

The researchers use a non-experimental descriptive-correlational research design to determine the difficulties encountered in the duration of the E-learning and its' effect on students' perceived learning and satisfaction.

Research Site

The researchers conducted the study at the College of Cebu Lapu-Lapu, and Mandaue grounds settled at A.C. Cortes Ave., Mandaue City. It offers Accountancy, Business Organization with four majors: Accounting Management, Financial Administration, and Human Resource Management. Since the assessment recognized the understudies' difficulties in E-Learning and its contribution to student learning and satisfaction, the zone was valuable for the examination.

Respondents

The researchers gathered 313 respondents enrolled from the College of Business and Accountancy. Slovin's formula was used to decide the examination's sample size on a snowball inspecting strategy.

Table 1. No. of respondents as to their Course and Year Level

	(f)	(%)		(f)	(%)
Course			Year Level		
BSA	66	21.10			
MA	59	18.80	1st year	149	47.60
FM	71	22.70	2nd year	119	38.00
MM	77	24.60	3rd year	31	9.90
HRDM	40	12.80	4th year	14	4.50
Total	313	100.00		313	100.00

Table 1 shows respondents' quantity based on Course and Year Level utilizing snowball examining as the information gathering method.

Instrumentation

The researchers use a self-assembled study survey made out of two sections. The first part presents the level of perception of the difficulties encountered in the duration of E-learning among students regarding online course quality, peer interactions, learning diversification, user-friendliness, and course design. The next part is concerned with the extent of the perceived difficulties in E-learning affecting students learning and satisfaction.

Treatment of Data

The researchers used Frequency and simple percentage, Weighted Mean, and Chi-Square Test of Independence. One-way ANOVA was used to analyzed and interpret the data accumulated.

Data Gathering

To achieve the appraisal study, the researchers sent a letter of intent directed to the Dean of the Business and Accountancy with the ultimate objective of data gathering, mentioning that approval to lead the survey and get the total number of enrolled understudies. The surveys were coordinated to the excellent year levels through Google structure as the essential instrument on a snowball examining technique.

RESULTS AND DISCUSSION

This portion presents the consequences of the data accumulated. The first part presents the information gathered on the level of perception on the difficulties encountered in the duration of E-learning among students in terms of online course quality, peer interactions, learning diversification, user-friendliness, and course design. The second part is concerned with the extent of the perceived difficulties in E-learning affecting students in perceived learning and student satisfaction. The third part is concerned with the relationship between the perceived problems in E-learning and the extent of contribution of the said difficulties to students' learning and satisfaction. Lastly, the fourth part pertains to significant differences in the extent of perceived difficulties when grouped by the extent of contribution of these difficulties to the perceived learning and satisfaction of the students.

Table 2. The Level of Students' Perceived Difficulties in the Duration of E-Leaning

Indicators	Mean	Interpretation	Rank
A. Online Course Quality			
The online course is full of learning with the aid of technology.	2.25	Slightly Perceived	1
The students were able to conceptualize and integrate the topics being discussed.	2.23	Slightly Perceived	2
It encourages students to read more about the topics being discussed to enhance their knowledge and ideas further.		Slightly Perceived	3
The online course has e-books and other available reference materials.		Slightly Perceived	4
The teacher exhibits expertise and capabilities in handling online classes with the use of the application software.		Slightly Perceived	5
Aggregate Mean	2.18	Slightly Perceived	

B. Peer Interactions			
Increases student engagement during grouping sessions using social media sites.	2.34	Slightly Perceived	1
Teachers' assessment and evaluation of students' performance increases through a virtual connection.	2.30	Slightly Perceived	2
The students quickly directed queries and clarification towards the person being asked.	2.27	Slightly Perceived	3
The student-teacher interaction during class discussions intensifies through the use of online application software.	2.20	Slightly Perceived	4
The exchange of knowledge and ideas among students increases through the adaptation of social media during class discussions.	2.11	Slightly Perceived	5
Aggregate Mean	2.24	Slightly Perceived	
C. Learning Diversification			
The student understands the importance of the topic that is being discussed through virtual discussion.	2.17	Slightly Perceived	1
The student conceptualizes all the inputs coming from the online discussion and applies them to personal lives.	2.16	Slightly Perceived	2
The student learns the basic principles, theories, and concepts of the subject that he/she will enroll with online applications software.	2.14	Slightly Perceived	3
The student acquires technical skills concerning technology utilization.	1.98	Slightly Perceived	4
Increased learning through research ideas by surfing the internet and by reading journals or articles.		Slightly Perceived	5
Aggregate Mean	2.08	Slightly Perceived	
D. User-friendliness			
The online enrolment process is understandable with the use of online application software.	2.22	Slightly Perceived	1
The website/ department portals/ Facebook page is available for queries.	2.21	Slightly Perceived	1
The organized portal enables the students to quickly determine the subjects that he/she needs to enroll.	2.05	Slightly Perceived	2
The difficulty of system usage in the online class.	1.94	Slightly Perceived	3
The student pays his/her entrance fee conveniently through affiliated banks and other remittances.		Slightly Perceived	4
Aggregate Mean	2.06	Slightly Perceived	

E. Course Design			
Video recording of the class discussions is available in Google classroom for students to review.	2.25	Slightly Perceived	1
Both asynchronous and synchronous delivery of teaching and learning is adopted to predict higher performance rating among students.	2.14	Slightly Perceived	2
Online examinations and evaluations are comprehensive and understandable.		Slightly Perceived	3
Student engagement rules and policies with the virtual topic discussion provide a venue for learning.		Slightly Perceived	4
Immediate social media platforms were used to increase student convenience in online classes.		Slightly Perceived	5
Aggregate Mean	2.10	Slightly Perceived	

Table 2 shows the Level of Students' Perceived Difficulties in the Duration of E-Leaning.

As to online course quality, an indicator in which the online course is full of learning with the aid of technology recorded the highest mean at 2.25 and interpreted as *slightly perceived* by the respondents. Oppositely, an indicator in which the teacher exhibits expertise and capabilities in handling online classes using the application software recorded the lowest mean of 2.10 and interpreted as *slightly perceived*. Generally, it implies a slight perception among students' regarding the difficulty they experienced in terms of online course quality in the duration of E-Learning.

According to Crews et al. (2017), course quality standards are a valuable component in the instructional design process. They help guide course writers, identify needed improvements within courses and programs, and create consistency in faculty expectations and student experience. It was further supported by Chao et al. (2010), stating that course quality standards allow institutions to identify and select standards that best reflect their brand, mission, and values in online education. Further, quality is getting upfront as online distance schooling moves into the standard of advanced education.

Peer Interactions, the indicator to increase student engagement during grouping sessions using social media platforms, recorded the highest mean of 2.34 and was interpreted as *slightly perceived* by the respondents. On the other hand, an indicator that is an exchange of knowledge and ideas among students' increases through social media adaptation during class discussion recorded the

lowest mean of 2.11 and interpreted as *slightly perceived*. It implies that the exchange of ideas from their classmates was not evident in the process.

Juvonen et al. (2012) evaluated that companions and other friend connections could inspire understudies to participate in school similarly to extracurricular exercises. Seeing how companions matter, research on the positive and negative engagement "effects" of companions and socially minimizing encounters, for example, peer dismissal and harassing, is exceptionally significant.

Learning diversification, the indicator in which students understand the importance of the topic discussed through virtual discussion, recorded the highest mean of 2.17 and was interpreted as *slightly perceived*. Contrariwise, the indicator states that a marker is expanded learning through examination thought by riding the web and understanding diaries or articles recorded. The respondents *slightly perceived* the least mean of 1.96. Generally, it implies that respondents do not use the online platform to widen their perspective by reading different literature sources. Moreover, the evidence of learning in different phase through the different online references and learning materials were not clearly emphasized. As per Tremblay-Wragg et al. (2019), the differentiated encouraging systems in college courses and assessment of the commitment of these methodologies and their setting of utilization on understudy learning inspiration factors balance the advantages of methodology broadening on understudies' inspiration to learn.

As to User-Friendliness, the indicator, the online enrolment process, is understandable with the use of online application software recorded the highest mean of 2.22 and recorded as *slightly perceived*. On the other hand, an indicator is that the student pays his/her entrance fee conveniently through affiliated banks and other remittances recorded the lowest mean at 1.87 and interpreted as *slightly perceived*. In general terms, students encountered difficulties using the system platform for school transactions such as school fees and enrolment processing. It is highlighted by Lynch (2019), which suggests that the mark of a great online training course is not just about the content. Since such courses depend on sight and sound, interconnected insight to prepare and teach learners, all aspects of the course's design, from images and text to overall site functionality, must work in harmony to meet and exceed the expectations of the course's user.

As to Course Design, the indicator, the video recording of the class discussions, is available in Google classroom for students to review recorded the highest mean of 2.25 and interpreted as *slightly perceived*. The indicator in which immediate social media platforms were used to increase student convenience on online classes recorded the lowest mean of 1.99 and was interpreted as *slightly*

perceived by the students. In totality, it clearly describes that social media were not evident usage among teachers to maximize student convenience in online classes. Furthermore, the course design is a glitch in students' perception regarding the total approach of each subject or course being offered. A determinant of the possible outcomes, assessments and evaluations that meet the goals and objectives set for the course empowers student learning, interest, and focus.

It was further supported by Dee (2017), in which a practical course requires cautious arranging and constant correction. Talk with partners who have shown the equivalent or comparable courses to gain from their methodologies and overall impressions of the understudies who commonly take the course. All professors would like their students to be prepared when they come to class, be motivated to learn, and achieve high-quality learning that prepares them for future classes and personal, social, and professional life experiences

Table 3. The Effect of the Difficulties in E-Learning in Students' Perceived Learning and Satisfaction

Indicators	Mean	Interpretation	Rank
A. Students' Perceived Learning			
Ready to comprehend the learning, which includes more than realities and data, and blend data into new bits of knowledge.	3.57	Greatly Extensive	1
Understands that learning includes frameworks that are gatherings of interrelated segments intended to accomplish the ideal objectives by and large.	3.54	Greatly Extensive	2
Understands and can apply the relevant information in practical and real-life situations.	3.50	Greatly Extensive	3
Able to conceptualize each subject is essential data, knowledge, and information.	2.56	Moderately Extensive	4
Partakes knowledgeably in choices about the turn of events and utilization of innovation in real-life situations guided by the learning from the subjects.	2.52	Moderately Extensive	5
Aggregate Mean	3.14	Moderately Extensive	
B. Students' Satisfaction			
Extent through which the personnel included multicultural viewpoint in the homeroom show, tasks, or conversations.	3.61	Greatly Extensive	1

Indicators	Mean	Interpretation	Rank
The occasion to take an interest in an exploration venture with a faculty.	3.55	Greatly Extensive	2
Faculty focus and interest in E-learning.	3.53	Greatly Extensive	3
Utilization of innovation in classes.	2.59	Moderately Extensive	4
Academic integrity of the department and program orientation.	2.58	Moderately Extensive	5
Aggregate Mean	3.17	Moderately Extensive	

Table 3 shows the effect of the difficulties in E-Learning in Students' Perceived Learning and Satisfaction. As to students' perceived learning, the indicator in which the readiness to comprehend that learning includes more than realities and data and blend data into new bits of knowledge got the highest mean of 3.57 and was interpreted as Greatly Extensive. While the indicator which states that students partake knowledgeably in choices about the turn of events and utilization of innovation guided by the learnings came from the subjects got the lowest mean of 2.52 and interpreted as Moderately Extensive. It implies that students' inability to utilize and apply much of their leanings came from the subject. Furthermore, this manifests that their difficulties in the E-Learning process affect their conceptualization, making it difficult to partake in real-life scenarios. As indicated by Theall (2004), the importance of making course content applicable not just assists understudies with dominating adequately by applying it to circumstances they see, yet this assists them with understanding the significance of learning the substance, and this way, be more persuaded in learning. Furthermore, these encompass the ability to conceptualized learning from the different subjects and create cooperative learning that can be applied to any situations that would best fit.

Concerning the Students' Satisfaction, the indicator that students were satisfied with the extent to which the faculty included multicultural perspective in the classroom presentation, assignments, or discussions got the highest mean of 3.61 and was interpreted as *Greatly Extensive*. However, the academic integrity of the department and program orientation got the lowest mean of 2.58 and was interpreted as *Moderately Extensive*. It implies that the impact of students' perception of the difficulties they encountered affects their satisfaction on the overall outcome of the E-Learning process. In all schools worldwide, understudy

satisfaction has been seen as a critical factor in assessing the idea of organizations given by the establishment. Being the actual beneficiary of the instructive informational organizations, understudies are in the right circumstance to choose the idea of organizations offered by their School (Pamatmat, 2018).

Table 4. Significant Relationship between the Difficulties in E-Learning and the Extent of Contribution of the said Difficulties to the Students' Perceived Learning and Satisfaction ($\alpha = 0.05$)

Variables	Computed Chi-Square	df	Critical Value	Significance	Result
A. Students' Perceived Learning					
Online Course Quality	16.041 ^a	14	23.685	Significant	Reject Ho
Peer Interactions	15.749 ^a	15	24.996	Significant	Reject Ho
Learning Diversification	16.605ª	14	23.685	Significant	Reject Ho
User-friendliness	23.321ª	15	24.996	Significant	Reject Ho
Course Design	11.977ª	15	24.996	Significant	Reject Ho
B. Students' Satisfaction					
Online Course Quality	16.041 ^a	15	24.996	Significant	Reject Ho
Peer Interactions	15.749 ^a	15	24.996	Significant	Reject Ho
Learning Diversification	16.605ª	14	23.685	Significant	Reject Ho
User-friendliness	23.321ª	14	23.685	Significant	Reject Ho
Course Design	11.977ª	15	24.996	Significant	Reject Ho

Table 4 shows the Significant Relationship between the Difficulties in E-Learning and the Extent of Contribution of the said Difficulties to the Students' Perceived Learning and Satisfaction. The data revealed a statistically significant relationship between difficulties in E-Learning (p-value <.05) and the extent of the said difficulties to the students' perceived learning and satisfaction. It implies that E-learning is a constant determinant of students' perceived learning and satisfaction in the department. Furthermore, the issues and difficulties mentioned in the study should be given emphasis and attention to meet the demands of the students. Ideally, this would promote higher integrity among faculties and increase the department's determination to provide a quality teaching and learning experience.

It was additionally upheld by Gray and DiLoreto (2016), expressing that course association and design, understudy commitment, student cooperation,

and educator presence has represented the significant association in understudy fulfillment and perceived learning in Web-based learning conditions.

Table 5. Significant Difference on the Extent of Perceived Difficulties when Grouped by its Extent of Contribution of these Difficulties to the Students' Perceived Learning and Satisfaction (df = 312; $\propto = 0.05$)

Variables	F-value	P-value	Significance	Result
A. Students' Perceived Learning				
Online Course Quality	0.018	0.000	Significant	Ho Rejected
Peer Interactions	1.978	0.000	Significant	Ho Rejected
Learning Diversification	0.418	0.000	Significant	Ho Rejected
User-friendliness	0.218	0.000	Significant	Ho Rejected
Course Design	0.001	0.000	Significant	Ho Rejected
B. Students' Satisfaction				
Online Course Quality	1.065	0.000	Significant	Ho Rejected
Peer Interactions	1.358	0.000	Significant	Ho Rejected
Learning Diversification	1.437	0.000	Significant	Ho Rejected
User-friendliness	1.164	0.000	Significant	Ho Rejected
Course Design	1.073	0.000	Significant	Ho Rejected

Table 5 shows the significant difference in the extent of perceived difficulties when grouped by the extent of these difficulties to the students' perceived learning and satisfaction. The investigation revealed statistically significant differences in how the perceived difficulties influence students' perceived learning and satisfaction. It implies that the department must commit in an investigative manner to highlighting how these variables affect the students' experience in E-learning. As per Baber (2020), communication in the homeroom, understudy inspiration, course structure, teacher information, and interaction are decidedly impacting understudies' apparent learning results and understudy fulfillment. Its disparities are helpful for the educationists and scholastics to recognize the elements which will improve understudy learning results and fulfillment level in E-learning.

CONCLUSIONS

The onset of the Pandemic changes the way teaching and learning are being delivered. E-Learning is the preferable way to continue education and the hopes of regaining the momentum of schools in giving students' the best experience of learning and satisfaction. In this study, the contingencies and the possibilities of restructuring the current learning process are investigated. The findings revealed that the students encountered difficulties through the course quality, peer interactions, learning diversification, user-friendliness of the process, and its course design in the duration of the process. Additionally, it was revealed that how they perceived these difficulties affects their perceived learning and satisfaction in the E-learning process. It was found out also that a higher level of difficulties would associate with dissatisfaction and lower student perception in learning. The study concluded that E-learning is not an easy process both for the institution and the students. It is a platform that should be present in the teaching and learning modalities in all institutions, regardless of the situation. Additionally, course quality, peer interactions, learning diversification, userfriendliness of the process, and its course contribute to increasing the student's perceived satisfaction and learning. Generally, the impact of the Covid 19 pandemic provides a manifestation that to increase student perceived learning and satisfaction; there is a need to intensify the execution in the administration, teachers, and the learning management systems used in a Higher Education Institution.

RECOMMENDATIONS

Based on the result, the researchers proposed the following:

The department should desire to initiate sustainability measures to facilitate further the importance and effectiveness of creating an environment where the E-learning process is conducive to enhance learning and satisfaction among students. The administration should endeavor to realize a platform that is applicable for everyone to access. Moreover, conduct a training program to fully explore the capability of the systems and the efficiency and effectiveness of the end-users.

The teachers should be initiative enough to create an E-learning environment engaging students' learning and satisfaction. Assessments and evaluations shall be engaging and serve the students' capability. The learning management systems

should be user-friendly, accessible anytime or to any gadgets available to the students. Additionally, teachers as users can remodel it by their set E-learning packages and processes.

Other variables not taken in this study could be examined as a recommendation for further studies on the significance of E-learning, given its role as an environment that promotes and enhances students' perceived learning and satisfaction.

TRANSLATIONAL RESEARCH

The results of this investigation could be translated into a Departmental E-Learning procedure which identifies the importance of identifying the necessary criteria to facilitate student learning and satisfaction. Other schools could also use the procedure as a model and a validation to sustain existing E-learning programs.

LITERATURE CITED

- Baber, H. (2020). Determinants of understudies' apparent learning result and fulfillment in Web-based picking up during the Pandemic of Coronavirus. *Journal of Education and e-Learning Research*, 7(3), 285-292. Retrieved from https://bit.ly/36SdTct
- Chao, I. T., Saj, T., & Hamilton, D. (2010). Utilizing synergistic course advancement to accomplish online course quality guidelines. *The International Review of Research in Open and Distributed Learning*, 11(3), pp.1-106. Retrieved from https://bit.ly/37ZzFen
- Chen, H. T. (2012). *Theory-driven evaluation: Conceptual framework, application, and advancement.* Alabama, Birmingham, Sage Publications. ISBN-1452252440. Retrieved from https://bit.ly/37XIpBT
- Choi, J. J., Robb, C. A., Mifli, M., & Zainuddin, Z. (2021). University students' perception to online class delivery methods during the COVID-19 pandemic: A focus on hospitality education in Korea and Malaysia. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 29, 100336. https://doi.org/10.1016/j.jhlste.2021.100336

- Crews, T. B., Bordonada, T. M., & Wilkinson, K. (2017). Student feedback on quality matters standards for online course design. *Educause Review*, 5. Retrieved from https://bit.ly/2XFMciO
- Dee, L. F. (2017). *The Force Obviously Configuration to Expand Understudy Commitment and Learning*. Association of American Colleges & Universities. Retrieved from https://bit.ly/3a9Cv11
- Donaldson, S. (2012). Strategies and Applications: Program Theory-Driven Evaluation of Science. Hove, East Sussex BN3 2FA, New York: Routledge. Retrieved from https://bit.ly/37cOUkY
- Downes, S. (2010). New technology supporting informal learning. *Journal of Emerging Technologies in Web Intelligence*, 2(1), 27-33. Retrieved from https://bit.ly/2mStsO0
- Foster, P. A., Reese-Weber, M., & Kahn, J. H. (2007). Fathers' parenting hassles and coping: Associations with emotional expressiveness and their sons' socioemotional competence. *Infant and Child Development: An International Journal of Research and Practice*, 16(3), 277-293. Retrieved from https://doi.org/10.1002/icd.507
- Funnell, C., & Rogers, P. J. (2011). Purposeful Program Theory: Effective Use of Theories of Change and Logic Models. San Francisco, California. John Wiley & Sons. Retrieved from https://bit.ly/2LpUpEw
- Gray, J. A., & DiLoreto, M. (2016). The impacts of understudy commitment, understudy fulfillment, and see learning in Web-based learning conditions. *International Journal of Educational Leadership Preparation*, 11(1), n1. Retrieved from https://bit.ly/3BuzKVu
- Jaradat, S., & Ajlouni, A. (2021). Undergraduates' Perspectives and Challenges of Online Learning during the COVID-19 Pandemic: A Case from the University of Jordan. *Journal of Social Studies Education Research*, 12(1), 149-173. Retrieved from https://www.learntechlib.org/p/219411/
- Jhon, W., Mustadi, A., & Zubaidah, E. (2020). Online Learning during Covid-19 Pandemic: Does It Run Well?. *Jurnal Pendidikan Progresif*, 10(3), 440-454. Retrieved from https://bit.ly/3Auk7MW

- Juvonen, J., Espinoza, G., & Knifsend, C. (2012). The Job of Companion Connections in Understudy Scholarly and Extracurricular Commitment. Handbook of Research on Student Engagement, pp. 387–401. Retrieved from https://bit.ly/3qRR5SU
- Lynch, M. (2019). 6 elements that hinder the user-friendliness of your online training. The tech advocate. Retrieved from https://bit.ly/33F0lAL
- Pamatmat, F. (2018). Service Quality Dimensions Of A Philippine State University And Students' Satisfaction: Bridging Gaps To Excellence. *International Journal of Advanced Research*, 6(7), 673-681. Retrieved from https://bit.ly/39QNezq
- Pratama, H., Azman, M. N. A., Kassymova, G. K., & Duisenbayeva, S. S. (2020). The Trend in using online meeting applications for learning during Pandemic COVID-19: A literature review. *Journal of Innovation in Educational and Cultural Research*, 1(2), 58-68. DOI: https://doi.org/10.46843/jiecr.v1i2.15
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1). Retrieved from https://bit.ly/3h9Eqq0
- Theall, M. (2004). Related course material to real-life situations. *Ohio: The Idea Centre*. Retrieved from https://bit.ly/2V2lCCe
- Tremblay-Wragg, É., Raby, C., Ménard, L., & Plante, I. (2021). The use of diversified teaching strategies by four university teachers: what contribution to their students' learning motivation?. *Teaching in Higher Education*, 26(1), 97-114. DOI: 10.1080/13562517.2019.1636221
- Wan Hassan, W. A. S., Ariffin, A., Ahmad, F., Sharberi, S. N. M., Nor Azizi, M. I., & Zulkiflee, S. N. (2020). Covid-19 pandemic: Langkawi vocational college student challenge in using google classroom for teaching and learning (t&l). *International Journal*, 9(3). https://bit.ly/3EWsd3m