

Engagement of Maritime Students to Online Learning

Junker Huga A. Agno¹, Cris Jusrine M. Belo¹,
Francis Guiller A. Castillo¹, Jun Abad M. Cuevas¹,
Luke Aldous D. Mico¹, Dr. Beverly T. Caiga²

¹Lyceum of International Maritime Academy

²College of Education, Arts and Sciences,

Lyceum of the Philippines University Batangas

²beverlycaiga@yahoo.com

Asia Pacific Journal of
Maritime Education

Vol. 6 No. 1, 77-83

June 2020

P-ISSN: 2423-2033

E-ISSN: 2467-513X

apjme@lpubatangas.edu.ph

www.apjme.apjmr.com

Abstract – This study aims to determine the level of engagement of maritime students to the online learning. It also sought to test the significance difference of the level of engagement to profile of the maritime students. The study used descriptive type of research method and was utilized to 254 maritime students. Result exposed that the maritime students are engaged on their online learning through the use of smartphones and data connection. It also shows that there is a significant difference on the most used gadget on the engagement of maritime students to online learning when grouped according to profile variables. Through this result, the researchers recommend to an action plan to enhance the engagement of maritime students to online learning

Keywords – engagement, maritime, online learning

INTRODUCTION

The concept of online learning has been around for years. There are lots of universities and institutions that have already started this kind of teaching since then. They found it advantageous since it is more convenient, considering students can have their own schedule, get the ease to come up with instant information by having quick access to different websites, and study at your own comfort. However, this kind of learning method is not for everyone. There are lots of things to consider if students want to enroll in this kind of learning method – a good internet connectivity, gadgets to use, and readiness in this approach. It has been said that online learning is for privileged people who have the means to pursue this kind of methodology. But now, due to the Covid-19 pandemic, online learning became an alternative approach for students to learn. Since face-to-face classes are impossible in this time of pandemic, online classes became an option of many universities to keep their students learning while being safe. It is a challenge to every university to conduct this type of curriculum.

Not every student is ready to face this new type of learning method. Adjusting to this kind of learning is hard, especially when you are taking up a skill-based program, like Maritime Education. It has shortcomings to maritime students as they are more focused in doing tasks and exams on-hand or in on-board alike

situations. It is hard to just rely on reading materials without applying it in situations. Also, peer-mentoring became harder since it is easier to discuss personally than communicating online because some students do not have the ease in network technology. In addition, it needs specific knowledge and skills to use e-learning tools since it is deeply reliant on online technology. On the other hand, it has advantages. It establishes personalized learning since students can learn autonomously in accordance with their learning techniques, such as study habits and time. It allows students to make personal decisions on the type and period of learning they have, so they take bigger responsibility. Students can access different learning aids, such as videos, PDFs, podcasts, and professors' teaching guides. Lastly, students can attend class wherever they are as long as they have good internet connectivity. By knowing the different pros and cons of online learning, we can see how students are engaged in online learning [1].

There is a thick wall among online learning and traditional learning. As the researchers experienced the set-up of online learning, they felt not much involved about it. Also, they have seen that there are numerous students who were not so committed to online learning. Through that, they figured out that it is vital to find the engagement of maritime students to online learning. In the observances of the researchers, they have noticed that the amount of absenteeism in their classes have

increased. It is correlated to the lack of self-motivation of students; there are students who pass their activities beyond the due date, and worse, do not submit.

Technical issues are another factor why students are not that connected to online learning. There are students who do not have enough a high bandwidth internet connection to surpass online activities and assessments. Also, not all students have an advanced medium for learning such as quality specifications of gadgets. This can also result in the lack of interest of students to pursue online learning.

In maritime education, e-learning forms can give additional accessible learning situations to reach the demands of the students' understanding. The quick progress of our technology and the constant improvement of e-learning can help to reach the needs of seafarers' understanding. Online learning has been the new method of teaching for maritime education and training. And for students to be more engaged, education authorities must build a suitable evaluation in exams for the purposes of e-learning in maritime education to enhance the whole quality of the students as navigating professionals [2].

The effectiveness of online learning depends on how good the learning programs and materials are. There are companies who make applications that deal with maritime education. These applications make distance learning accessible through the internet [3]. The more creative and innovative learning is, the more engaged the students are. There is an intensifying effect when professors execute creative methods in teaching with the use of technology [4].

Students' engagement has been theorized in various approaches throughout researchers and disciplines [5]. To further justify this idea, the main information about the engagement of students to online learning was searched like the significance of online learning engagement of the students. This strengthens that the students' engagement is important to their success. With the current situation of students to online learning, the researchers sought the efforts of the students to stay connected with the new learning method. Students are doing their part to learn and to cope with it. It generates an environment that is interconnected and collaborative in learning. This kind of set-up really puts the students in the box for them to be more associated with each other. It presents openings for students to establish relationships with their peers and professors. The interactions between students and professors were deepened. With this kind

of situation, they have formed a harmonious online learning experience.

Amidst the pandemic, it is very tough to learn online. This study has elaborated and explained the aspects that affect the engagement of maritime students to online learning and how involved they are. This study determined the actions that were needed to improve the engagement of LIMA students to online learning. This strengthened the possibility of online learning to be a great replacement in terms of delivering and acquiring knowledge. The LIMA institution will gain from this study and may confer to the plan of actions of the researchers.

OBJECTIVES OF THE STUDY

This study determined the engagement of Lyceum International Maritime Academy students to online learning. Specifically, the researchers sought to present the profile of the respondents in terms of program, year level, internet connectivity, and gadgets used; to determine the engagement of maritime students to online learning; to test the significant difference when responses are grouped conferring to the variable of profile; to propose a plan of action based on the results of the study.

MATERIALS AND METHODS

Research Design

This study utilized a quantitative, non-experimental design which is known as descriptive-comparative method. It provided strategies to the researchers to adapt for them to collect precise, objective, and explainable data. It attempted to describe the rapport among variables. Through this design, the independent variable was not manipulated; the participants were not given a random appointment of questionnaire [6].

Participants of the Study

Cadets from BSMT and BSMarE of Lyceum International Maritime Academy who are currently enrolled in A.Y. 2020-2021 and involved in the online learning curriculum were the respondents of this research. They are randomly selected through an online questionnaire using Google Forms. The researchers have gathered data from students with a total of 254 respondents. The respondents from BSMT are 132 (52%) and 122 (48%) respondents from BSMarE, according to the statistics of the demographic data from the online survey.

Data Gathering Instruments

The data needed in this study were acquired through a questionnaire that was adapted and revised by the researchers from the questionnaire of Marcia D. Dixson (2015) about the engagement of students to online learning. The initial part of the survey is the Demographic profile of the respondents such as program, age, and most used internet connection and gadget in online learning. The second part of the questionnaire is the Online Engagement Scale. The questionnaire was validated by the adviser.

Data Gathering Procedures

The researchers organized the questionnaire and virtually distributed via Google Forms to LIMA students as respondents. They randomly picked students who would answer the questionnaire. The substances of the questionnaire were elaborated before answering. The accomplished questionnaire was collected, and the tallied data were put in charts and tables to exhibit the result of the survey.

Data Analysis

All needed statistical information were counted, encrypted, and explained by the use of various tools such as the distribution of frequency, weighted mean, and Analysis of Variance (ANOVA). These statistical instruments were employed and centered on the aims of the research. Furthermore, all obtained records were considered using a statistical software, PASW version 18 to help evaluate the outcomes of the analysis.

Ethical Considerations

For the observance of vastly confidential description of the procedures, no personal data from the respondents were stated in the study. The identities of the participants were not shown apart from they were college students. The researchers did not give any personal judgment, only evidence and outcomes which are based on the information collected were expounded.

RESULTS AND DISCUSSION

Table 1 introduces the profile of the respondents. As viewed from the table, most of the participants are BSMT students. This is because most of the respondents asked were BS Marine Transportation (BSMT) students. There are lots of cadets who want to be a captain of the ship for several reasons. The rank of being a captain is the highest on-board. When having this rank, authority and respect are earned, having the sense of supremacy. In addition, being a captain gets various benefits and high wages [7].

Table 1
Characteristics of the Respondents Profile

Program	Frequency	Percentage (%)
BSMT	132	52.0
BSMarE	122	48.0
Age		
17 – 19	86	33.9
20 – 22	160	63.0
23 – 25	8	3.1
25 and above	86	33.9
Most Used Internet Connection		
Cable Broadband	25	9.8
Wi-fi	97	38.2
Cellular Data	132	52.0
Most Used Gadget		
Desktop/laptop	58	22.8
Tablet	4	1.6
Smart Phone	192	75.6

In terms of age, as visualized from the table, many of the participants are in the age of 20-22 with the frequency of 160 and a percentage of 63.0%. This result shows that most of the respondents who take BSMT and BSMarE are Senior IV.

In terms of most used internet connection, it shows that most of the maritime students are using cellular data in their online classes, with the frequency of 132 and a percentage of 52.0%. This result only shows that cellular data is more affordable and comfortable to use in online class. Further, cable broadband lasts with the frequency of 25 and a percentage of 9.8%.

With regards to most used gadgets, the table shows that most maritime students are using smartphones in online class with the frequency of 192 and a percentage of 75.6%. Contrast to tablets which have frequency of 4 and a percentage of 1.6%. This is because smartphones are cheaper and easier to use than other gadgets.

According to Gebb and Young [8] the reason why students prefer to use smartphones in online learning is its convenience. Wherever you are, you can use it if there is an internet signal. Nowadays, many universities and institutions are adapting mobile-ready apps to use in online learning. It recommends effectively all the elements of the virtual classrooms in mobile-friendly apps.

Table 2
Online Engagement Scale

Indicators	WM	Verbal Interpretation	Rank
1. I make sure to study on a regular basis.	3.46	Engaged	3.5
2. I put forth effort on my studies.	3.43	Engaged	7
3. I stay up on the readings.	3.30	Engaged	16
4. I look over class notes between getting online to make sure I understand the material.	3.33	Engaged	15
5. I am organized.	3.40	Engaged	11.5
6. I take good notes over readings, PowerPoints, or video lectures.	3.41	Engaged	10
7. I listen/read carefully.	3.48	Engaged	1.5
8. I apply course material to my life.	3.46	Engaged	3.5
9. I find ways to make the course interesting to me.	3.43	Engaged	7
10. I desire to learn the material.	3.45	Engaged	5
11. I have fun in online class, discussions or via email with the instructor or other students.	3.23	Engaged	18
12. I participate actively in small-group discussion forums.	3.35	Engaged	13
13. I help my fellow students.	3.48	Engaged	1.5
14. I get good grades.	3.42	Engaged	9
15. I do well on the tests/quizzes.	3.43	Engaged	7
16. I engage in conversations online (chat, discussions, email).	3.34	Engaged	14
17. I post in the discussion forum regularly.	3.40	Engaged	11.5
18. I get to know other students in the class.	3.27	Engaged	17
Composite Mean	3.39	Engaged	

Legend: 3.50 – 4.00 = Highly Engaged; 2.50 – 3.49 = Engaged; 1.50 – 2.49 = Less Engaged; 1.00 – 1.49 = Not Engaged

Table 2 show the online engagement of the maritime students. As shown “I listen/read carefully”, and “I help my fellow students” (3.48) tied up in rank 1.5. Students really listen/read carefully in discussions since it is one of many ways to learn. They do it for the sake of learning so they can pass the courses. According to Rogers and Welch [9], 60% of all confusions came from weak listening skill and 1% from mediocre reading comprehension and that is the reason why students do listen/read carefully, to avoid misunderstandings.

The item, “I help my fellow students” (3.48) made in ranked 2 with verbal interpretation of “engaged”. It shows that camaraderie was really practiced even not in classroom set-up. According to King [10] students assisting each other has a great impact in their relationship. Collaboration with fellow students raises enthusiasm and supports each other to take accountability for their own learning and for their peers.

It was also presented that the rank 3.5 has 2 indicators – “I make sure to study on a regular basis” and “I apply course material to my life.” Based on what

Olatoye [11] stated, the regular study habit plays a significant role in learning. She added that there are testimonies which prove that it is one of keys for success. With that, “I make sure to study on a regular basis” has a weighted mean of 3.46 and verbally interpreted as engaged. In addition to that, “I apply course material to my life” has the same weighted mean with 3.46 and engaged as the verbal interpretation. Utilizing learning to real-life circumstances is essential, so learning can be useful and appropriate [12]. This proved that the knowledge that was acquired from courses are applied into the personal lives of each student.

The researchers observed that students of Lyceum of International Maritime Academy have 3.45 value from the weighted mean, and it shows that they are engaged with the statement “I desire to learn the material” which ranked number 5. Learning and sharing the materials together with their classmates boosts their understanding of the lesson. This process will uphold their aspiration on their study hours. According to Potts [13] desire is the trigger that makes the student more competent enough to achieve their

goals. Students must have a desire for studying to perform well. Without desire, actions are made only for compliance but not for satisfaction.

The indicators "I put forth effort on my studies"; "I find ways to make the course interesting" and "I do well on quizzes and tests" (3.43) tied on ranked 7th. Efforts of the student are distinguished according to their own perception of it. It means that the effort they exert depends on how studious they are. Based on the study of Saad [4] effort on studying is the key factor in having a successful future. The more effort you put into studying, the greater chance of having a good future.

Individuals prefer to study with different approaches to make their studies and learning modules more enjoyable. Students often spice up their studies by relating the lesson to their favorite hobby. This process allows the students to widen up their understanding and learning skills on each lesson. Usually, this process was used to eliminate the boredom factor on each lesson [14]. Tucker [15] expounded that distance learning leads students to become more innovative in many ways. It allows them to expand the use of the internet as a medium of distance learning.

Lastly, the items "I stay up on the readings" (3.30); "I get to know other students in the class" (3.27) and "I have fun in online class, discussions or via email with the instructor or other students" (3.23) are the least among all the indicators. Students may do not keep up with reading for the reasons that they may lack of discipline to concentrate on the vital aspects of reading, they do not have enough skill to completely understand readings and some students feel like reading before the exams are more beneficial.

As Hew and Cheung [16] explained, no personal interaction affects the enjoyment of students in online learning. Students are not involved in any type of personal connection, contrasting their experience in traditional curriculum. Students are more apt to be cloyed with this set-up wherein only the professors are the ones who are talking, and students' gadgets are on mute to avoid any nuisance sound, but behind that, their attention is onto something else and not on the discussion.

The table 3 presents the different answers on online engagement when grouped that corresponds to profile. It was observed that there was a significant difference on the online engagement scale when grouped according to the most used gadget, while the acquired p-value is 0.028 was below the alpha level of 0.05. This implies that there was a significant difference detected and centered on the post hoc test

conducted, smartphone users had greater assessment on online engagement scale.

Table 3
Difference of Responses on Online Engagement Scale When Grouped According to Profile

	F-value	p-value	I
Program	0.481	0.631	NS
Age	2.250	0.108	NS
Commonly Used Connection	3.036	0.050	NS
Most Used Gadget	3.631	0.028	S

Legend: Significant at p-value < 0.05

It was shown on the table that the program was not significant, because most of the students in Lyceum International Maritime Academy are the BSMT while the BSMarE, on the other hand, has a low percentage.

The researchers noticed that the age was not significant, since the range of the age of the respondents are majority at 21 to 22 years of age. All respondents are students at Lyceum International Maritime Academy.

As reflected in the table, the most used internet connection was not significant, as the cellular data was the Most Used Internet Connection of the students at Lyceum International Maritime Academy.

The researchers observed that the Most Used Gadget was Smartphone obtained p-value of 0.028. This indicates that there was a significant difference noticed and founded on the post hoc test conducted, smartphone users had greater assessment on online engagement scale.

Over the last several years, the use of smartphones as a mobile computing device has grown, with many online students preferring to utilize the device to access course information and communicate with instructors and classmates in online course offerings. These benefits include the capacity to participate in learning activities from almost anywhere, as better LMS accessibility, along with the abundant nature of the cell phone, can lead to a change or rise in engagement-specific tasks, which can assist raise student engagement [18].

As seen in Table 4, the researchers were able proposed plan of action to enhance the engagement of maritime students to online learning which involves: Engagement in online communication; Scrutinization of noted information before the class to guarantee knowing the course material; Reading learning materials; Acquaintance of students with each other; and Enjoyment in online learning experience of students with their peers and professor.

Table 4
Proposed Plan of Action to Enhance the Engagement of Maritime Students to Online Learning

Key Results Area	Activity/Strategy	Persons Involved
Engagement in online communication	Give basic details and emphasize the intent of the upcoming conversation. Have an interesting and course-related topic for students to talk about.	LIMA Faculty
	Improve social and language skills. Have the courage to be involved in on-screen conversations.	Students
Scrutinization of noted information before the class to guarantee knowing the course material	Augment the merit of the students who actively participate in class.	LIMA Faculty
	Make reviewing notes before joining online discussion a habit.	Students
Reading learning materials	Provide accurate, creative, and interactive reading materials. Give limits for how long reading must take. Impart queries to assist reading.	LIMA Faculty
	Keep yourself up by applying active study practices.	Students
Acquaintance of students with each other	Activities that support peer discussions.	LIMA Faculty
	Participate in group discussions. Connect with the other students through social media platforms.	Students
Enjoyment in online learning experience of students with their peers and professors	Gamify the online learning involvement. Create various learning alternatives.	LIMA Faculty
	Actively connect with other students and instructors to be more engaged.	Students

CONCLUSION AND RECOMMENDATION

Majority of the respondents are BSMT, ages 20-22, have utilized smartphones for online learning and are using cellular data for internet connectivity. Maritime students are engaged online learning. There is a significant difference on the most used gadget on the engagement of maritime students to online learning when grouped according to profile variables. Program, age, and most used internet connectivity turned out to be insignificant. A plan of action was proposed to enhance the engagement of maritime students to online learning.

It was recommended that Lyceum of the Philippines University – Batangas administration may improve their learning management system (Moodle) for better online learning experience. They may also hire tech-savvy professors to be able to keep up with the new learning method. The faculty may further strengthen their skills and knowledge to be an effective online professor. Future researchers may explore a similar study by using different variables such as socio-economic profile and general weighted average of the students. The plan of action may be tabled and evaluated for implementation.

REFERENCES

- [1] Norman, S. (2016) 5 Advantages of Online Learning: Education Without Leaving Home. *eLearning Industry* [online]
- [2] Chen, X., Bai, X., & Xiao, Y. (2017). The application of E-learning in maritime education and training in China. *TransNav: International Journal on Marine Navigation and Safety of Sea Transportation*, 11(2).
- [3] Galić, S., Lušić, Z., & Stanivuk, T. (2020). E-learning in maritime affairs. *Journal of Naval Architecture and Marine Engineering*, 17(1), 38-50.
- [4] Saad, L. (2019). Teachers who Promote creativity see educational results. *Gallup Blog*.
- [5] Azevedo, R. (2015). Defining and measuring engagement and learning in science: Conceptual, theoretical, methodological, and analytical issues. *Educational psychologist*, 50(1), 84-94.
- [6] Cantrell, M. A. (2011). Demystifying the research process: Understanding a descriptive comparative research design. *Pediatric Nursing*, 37(4), 188.
- [7] Harrison, J. A., & Harrison, J. A. (2012). 3. Loss: Jumping Ship for Higher Ground. In *Buoyancy on the Bayou* (pp. 89-110). Cornell University Press.
- [8] Gebb, B. A., & Young, Z. (2014). Mobile resource use in a distance learning population: What are they really doing on those devices?. *Journal of library & information services in distance learning*, 8(3-4), 288-300.
- [9] Rogers, A., & Welch, B. (2009). Using standardized clients in the classroom: An evaluation of a training module to teach active listening skills to social work students. *Journal of Teaching in Social Work*, 29(2), 153-168.
- [10] King, J. (2019). Asked students to help each other understand ideas or concepts. *Retrieved February, 14, 2019*.
- [11] Olatoye, R. A. (2009). Study habit, self-concept and science achievement of public and private junior secondary school students in Ogun State, Nigeria. *African Research Review*, 3(4).
- [12] Williams, K. C., & Williams, C. C. (2011). Five key ingredients for improving student motivation. *Research in Higher Education Journal*, 12, 1.
- [13] Potts, H. W. (2011). Student experiences of creating and sharing material in online learning. *Medical teacher*, 33(11), e607-e614.
- [14] Zubairu, U. (2016). Making the Student Learning Experience Fun, Memorable and Effective: A Case of Entrepreneurship Students. *International Journal of Social Sciences & Educational Studies*, 2(4), 74.
- [15] Tucker, S. (2001). Distance education: Better, worse, or as good as traditional education?. *Online journal of distance learning administration*, 4(4).
- [16] Wieling, M. B., & Hofman, W. H. A. (2010). The impact of online video lecture recordings and automated feedback on student performance. *Computers & Education*, 54(4), 992-998.
- [17] Hew, K. F., & Cheung, W. S. (2014). Students' and instructors' use of massive open online courses (MOOCs): Motivations and challenges. *Educational research review*, 12, 45-58.
- [18] Miller, B. (2018). *Smartphones for Online Study: Effects on Learning and Engagement*. The University of Liverpool (United Kingdom).