Assessment on the Online Learning Readiness of Maritime Students

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Abstract – *Since the implementation of online learning, several students have been unprepared for this type of environment, which has resulted in issues such as internet problems and breakdowns when students face challenges in their studies. It may have an impact on their academic achievement. The researchers used quantitative research design. The respondents in this study were maritime students who were studying in Lyceum International Maritime Academy composed of seventy-four (74) Junior II; one hundred thirteen (113) Senior II and one hundred one (101) Senior IV; In BSMT two hundred fifty-five (255) and BSMAR-E thirty-three (33). It was revealed that Maritime students are ready in the online learning. There is a significant difference on the effect of Year Level and Internet Connectivity on the online learning readiness of maritime students when grouped according to profile variables. Program and Gadget Used turned out to be insignificant. Furthermore, it was recommended for the faculty members, in collaboration with LIMA, may modify the existing syllabus by creating new learning activities that can be completed at least with a mobile phone. LIMA may organize seminars and webinars concerning in online learning by collaborating with General Education professors for faculty members and students.*

Keywords – *Internet Connectivity, Gadgets, Learning Experience, Online, Pandemic*

INTRODUCTION

People nowadays are struggling because of the disease Covid-19, it is deadly and contagious that has affected the global economy. One affected by this is the education industry, and this fear is likely to spread globally all over the education sector. Several schools and colleges are temporarily closed because of this outbreak of the Covid-19. By this, they face problems on how they will solve it by assuring the safety of the university workers, teachers and students from a global pandemic that is rapidly moving [1]. They find ways wherein students can still continue their classes. They come up with one of the most popular methods which is the online learning. Nowadays, it is used all over the world as the tool for the learning of the students.

Online learning is a self or independent learning among distance learners without regular face to face teaching. It is now considered as a force of contributing to safety of a person, to prevent the spread of the new corona virus in our country. It uses internet technology that influences the lives of every people with the changes in learning method of the students. Online learning is described as synchronous or asynchronous learning environment that use mobile phones, tablets, pc desktop and laptops with internet to access in their respective site for learning. With these kinds of environment, students can easily learn and communicate with their professor independently [2]. Attending online class, interaction between students and teachers are the synchronous learning environment while sending the activities and just giving the deadline for students to comply is the asynchronous methods. Online learning of the students in the Philippines is very challenging. Especially to those students who have no good internet connections. It has a big impact to the learning of every students. In the country, the internet connection is not good. According to Tuntirojanawong [3], being comfortable to the learning system is important because it will lead to the success of the students.

Since online learning is implemented, there are some students who are not ready with this kind of environment and it leads to some problems of students such as having an internet problem, having a breakdown when they encounter difficulties in their studies. It can affect their academic performance. The ability and knowledge of the students for communication, independent learning and motivation for leaning are the important elements to sustain the needs of the students. Online learning readiness is defined as being ready for any online learning experience physically and mentally [4].

Lyceum International Maritime Academy (LIMA) is one of the schools currently using an online learning as the mode of their learning for the maritime students. Their courses are more on application and also actual so they can operate in the ship properly when they are onboard. The researchers in conducting this study would like to know if the students are ready in this kind of learning method since this is very new to everyone. Determining the level of readiness will provide awareness to the universities, institutions and governments to develop a better strategy that will be useful in the educational sectors.

OBJECTIVES OF THE STUDY

The primary objective of the study is to determine the online learning readiness of maritime students of Lyceum International Maritime Academy. Specifically, the study aims to present the profile of the respondents in terms of: Program, Year level, Internet connectivity, and Gadgets used. Next is to determine the online learning readiness of maritime students, and to test if there is a significant difference in the variables of this study when respondents are grouped according to profile variable, and finally to propose an action plan based on the result of the study.

MATERIALS AND METHODS

Research Design

The researchers used quantitative research design. It focuses on objective measures, analyzing the numerical data that gathered through questionnaire and surveys by computing statistical data using computer tools. Its primary goal is to gather numerical data and generalize it across various individuals or to define a specific phenomenon.

Participants of the Study

The respondents in this study were maritime students who were studying in Lyceum International Maritime Academy composed of seventy-four (74) Junior II; one hundred thirteen (113) Senior II and one hundred one (101) Senior IV; In BSMT two hundred fifty-five (255) and BSMAR-E thirty-three (33). The researchers used random sampling, which is a technique that randomly selected the respondents in the population.

Instruments

The researchers used standardized questionnaire for the data collection of student's online learning readiness in Lyceum International Maritime Academy. It is entitled "Online Learning Readiness Questionnaire" developed in 2014 by Dr. Vicki S. Williams. She is a manager, assessment and evaluation Research at Penn State University. It is a questionnaire to assess the readiness into online learning and it is composed of thirty (30) questions. It is validated by the adviser, statistician and faculty from LIMA.

Data Gathering Procedure

The researchers made standardized questionnaire using Google Forms, an application for creating online surveys. Respondents were recruited through online platforms like Facebook and Messenger, a chat and video call app wherein the person is briefed about being a participant to the aforementioned study. The researchers followed the steps in gathering the data that lasted for almost three weeks since some of the respondents has a problem with their internet connection.

Data Analysis

The data analysis was conducted based on the two objectives prepared by the researchers on the study. It uses frequency distribution, weighted mean, an Analysis of Variance. Furthermore, in order to analyze and compute the results of the study, the researchers used the statistical software PASW version 18.

Ethical Consideration

Ethical considerations were highly used in the study wherein there is an informed consent before answering the questionnaires, no harm was applied to the respondents in the duration of the study, and maintained high respect for privacy, anonymity and confidentiality of each respondents.

RESULTS AND DISCUSSION

Table 1
Profile of the Respondents

Program	Frequency	Percentage
BSMT	255	88.5
BSMAR-E	33	11.5
Year Level		
Junior II	74	25.7
Senior II	113	39.2
Senior IV	101	35.1
Internet Connectivity		
Home Wifi	117	61.5
Pocket Wifi	10	3.5
Mobile Data	101	35.1
Gadget Used		
Mobile phone	224	77.8
PC	19	6.6
Ipad/tablet	2	0.7
Laptop	43	14.9

Table 1 presents the profile of the respondents; majority of the respondents are BSMT with a frequency of 255 and percentage of 88.5 while there were only 33 BSMAR-E or a percentage of 11.5. This result only proves that majority of students aspire to be a deck cadet for the reason of fear on health issues on engine department. In terms of year level, majority of student respondents are part of senior 2 with a frequency of 113 and a percentage of 39.2 while there are only 74 or 25.7 Junior 2. It implies that the Senior 2 outnumbered the Junior 2 because of the pandemic causing the late or fewer enrollees of juniors. Furthermore, when it comes to internet connectivity, home WIFI dominated with a frequency of 117 or a percentage of 61.5 while 10 or 3.5 answered pocket WIFI; this shows that home WIFI is more popular because it is more efficient. When it comes on gadgets used, mobile phones tacked the list with a frequency of 224 and a percentage of 77.8 while iPad/tablet only got 2 or 0.7, the fact that phones exceed the usage of other gadgets is because of its availability and portable usages. Based on the study of Artyushina and Sheypak [5], essentially every student has, at any rate, one cell phone, as it has become an exceptionally helpful apparatus to get data.

Table 2
Online Learning Readiness

Indicators	WM	VI	R
1. I am good at setting goals and deadlines for myself.	3.47	R	5.5
2. I have a really good reason for taking an online course.	3.38	R	13
3. I finish the projects I started.	3.52	HR	2
4. I do not quit just because things get difficult.	3.63	HR	1
5. I can keep myself on track and on time.	3.47	R	5.5
6. I learn fairly easily.	3.20	R	22
7. I can learn from things I hear, like lectures, audio recordings, or podcasts.	3.33	R	15
8. I have to read something to learn it best.	3.42	R	10
9. I have developed good ways to solve problems I run into.	3.38	R	13
10. I learn best when I figure things out for myself.	3.48	R	4
11. I like to learn equally well in a group or on my own.	3.43	R	8
12. I am willing to send e-mail to or have discussions with people I might never see.	3.28	R	19
13. I usually study in a place where I can work on assignments without distractions.	3.52	HR	3
14. I can ignore distractions around me when I study.	3.15	R	25
15. I am willing to spend 10-20 hours each week on an online course.	3.18	R	24
16. I keep a record of what my assignments are and when they are due.	3.43	R	8
17. I plan my work in advance so that I can turn in my assignments on time.	3.44	R	7
18. When I study, people around me will help me work and not try to distract me.	3.30	R	17
19. I am willing to use e-mail and other online tools to ask my classmates and instructors questions.	3.38	R	13
20. I am fairly good at using the computer.	3.26	R	20
21. I am comfortable surfing the Internet.	3.33	R	14
22. I am comfortable conducting searches, setting bookmarks, and downloading files.	3.32	R	16
23. I am comfortable installing software and changing configuration settings on my computer.	3.09	R	26
24. I know someone who can help me if I have computer problems.	3.20	R	22
25. My computer runs reliably on Windows XP/Vista/7 or on Mac OS 10.4 or higher.	2.97	R	28
26. I have a printer.	2.60	R	30
27. I am connected to the Internet with a fairly fast, reliable connection.	2.87	R	29
28. I have virus protection software running on my computer.	3.05	R	27
29. I have headphones or speakers and a microphone to use if a class has a videoconference.	3.20	R	22
30. My browser will play several common multimedia (video and audio) formats.	3.30	R	18
Composite Mean	**3.29**	**Ready**	

Legend: 3.50 – 4.00 =Highly Ready (HR); 2.50 – 3.49 = Ready(R); 1.50 – 2.49 = Not Ready(NR), 1.00 – 1.49 = Highly Not Ready (HNR)

As seen from Table 2, present items were rated strongly agree and agree as revealed by the composite mean of 3.29. Among the items cited, "do not quit just because things get difficult" was the most observable effects of online learning since it obtained the highest rank. According to Atienza et.al [6], the study shows that the students of maritime have significantly higher persistence in doing their work and students have high positive attitude in instructional materials. It was followed by the item "finish the projects I started" and "I usually study in a place where I can read and work on assignments without distractions" is tied with a

weighted mean of 3.52. Students prefer online learning to traditional learning, and they are more efficient in doing their projects because it provides more flexibility and convenience to them [7].

It was followed by the item "I usually study in a place where I can read and work on assignments without distractions." is tied with a weighted mean of 3.52. In contrast to the study of Marouane et.al [8], online learning is inefficient due to students' lack of interest in the topic and also to comply with their requirements, as well as the fact that their attention is often compromised by other factors. Some students have decided to skip online classes and assignments in order to immerse themselves into today's entertainment and they are distracted by the free use of phone, online games and to update in their social media. On the other hand, the items such as "learn best when I figure things out for myself", were rated the least. Then both "good at setting goals and deadlines for myself" and "keep me on track and on time", is tied with a weighted mean of 3.47 at the rank 5.5. his will give them to concentrate on their long-term goals and make better academic decisions. In addition, "plan my work in advance so that I can turn in my assignments on time" 3.44 respectively. Students would like to have control over their academic success because it influences their educational life. They are more diligent because they are responsible for their educational success. And they believe that this will impact to their academic performance.

On the other hand, the item "I have a printer" ranked the lowest with the weighted mean of (2.60) and rank number 30. This only shows that buying a printer is still not a priority of the students, because there is nothing to print at the moment since all the requirements are being submitted online or soft copy only. Innovation immensely affects appraisal, this incorporate the accommodation of tasks, evaluation and criticism given are performed by electronic records [9]. The online assignment management system is within learning management system. This framework is to deal with the online task accommodation and evaluating. Unlike in face to face classes, the students needed to submit their assignments through hard copy. It is quite challenging to the students in terms of date of submission and cost of printing and the lecturer need more time for marking [10].

It was followed by the item "I am connected to the internet with a fairly fast, reliable connection such as DSL or cable modem" rank second to the lowest with the weighted mean and rank number 29. It means that the students does not have fast and reliable internet connection, this is because of the internet connection which is very poor. Most of the students are using free-data in messenger to stay connected. This means that not all the students have internet access. Also the location of students, some are located in a place with a poor internet connection. According to the Speed test Global Index in 2020, Philippines is ranked 111th under mobile speed. This shows that the internet connection in the country is not good compared to other countries [11]. Online education was very new and the country is behind other countries. The students in the Philippines is in a dilemma, because of very poor internet connection and this means students cannot access the e-learning sites easily [12].

The item "my computer runs reliable on windows XP/Vista/7 or on Mac OS 10.4" rank third to the lowest with the weighted mean of (2.97). It shows that the students have PC or laptop used as a gadget does not have a high version of it. Maybe they cannot afford to buy a personal computer or a laptop with high version. All government-funded schools in the Washington district are mixed too in showing students from a remote place. Educators are giving their exercises via zoom and others are transferring to their online platforms. But in some, learning materials are not provided online because they are worried that not all students have their laptops or internet at home [13]. Instructors utilizing advances in their training and learning practices are important and compelling to upgrade educating and learning in the homeroom. Gadgets likewise accept critical part in learning, to be agreeable in the creation pattern of learning and improve the learning results of the students [14].

Also, the item "I have virus protection software running on my computer" (3.05) ranked least. It shows that the students are not using PC or laptop as gadgets in online learning. Most of the students prefer to use mobile phones, because it is easy to use. Mobile learning is new in learning environment. Students used mobile phones for many reasons including education. It brings a major interest to the educators towards the acceptance of mobile learning [15]. Most of the students have their own cell phones and personal computers for language learning. The instructors favor utilizing cell phones in the classroom [16].

Together with the item "I am comfortable installing software and changing configuration settings on my computer" rank fifth to the lowest with the weighted mean of (3.09) and rank number 26. This only means that the students are not good in using PC or

laptop as a gadget in online learning, because most of them are using mobile phones. In rapidly changing world, Digital literacy is an essential skill for students learning [17]. Propelling students' computer capability has become a massive test for instructive specialists and course designers. In any case, amazingly limited thought has been facilitated toward middle school understudies' computerized capability recorded as a hard copy on PC helped language learning. Along these lines, this mixed technique study explores middle teachers' and understudies' points of view on the understudies' advanced proficiency level and issues relating to it [18].

It was followed by the item "I can ignore distractions around me when I study" rank sixth to the lowest. It shows that most of the students can easily get distracted when they are studying. Also, social media can distract the student. This results is lack of focus while studying. According to Dontre [19], the effects of student laptops on academic deprivation are relatively ambivalent, the debate is mainly in the current educational environment. The adverse impact of student smartphone use and social media use on academic deprivation is even more noticeable, especially with the proliferation of personal digital devices. Exceptional interruptions are available in no classroom conditions, and numerous endeavor to perform multiple tasks while learning online [20].

Also, the item "I am willing to spend 10-20 hours each week on an online course" rank seventh to the lowest. It means that most of the students are struggling with poor in time management and it is the reason why students abandon online courses. Issues, for example, the disease had cascading types of influence on members 'capacity to follow their learning. A couple of sudden issues in their own lives can make students fall behind in their examinations and work task, along these lines influencing their learning experience [21]. Good online teaching practices should have a built-in feedback component and accommodate viable time for the executives, regard for different abilities and learning styles with continuous checking and direction of students [2].

Table 3

Difference of Responses on Online Learning Readiness When Grouped According to Profile

	F-value	p-value	I
Program	1.769	0.078	NS
Year Level	8.715	0.000	S
Internet Connectivity	8.456	0.000	S
Gadget Used	0.658	0.579	NS

Legend: Significant at p-value < 0.05; Significant (S) Not Significant (NS)

Table 3 presents the correlation on online learning readiness when organized according to profile. It was seen that there was a significant distinction on online learning activities when grouped according to year level and internet connectivity since the aquired p-value of 0.000 was lower than the alpha level of 0.05. The study was supported based on the post hoc test conducted by the researchers that the students from Junior II and those who uses pocket Wi-Fi have greater assessment on online learning readiness.

In addition, on the results gathered from the survey, there is a significant relationship on respondents' performance in Gadget Used and its effects to their Online Learning as maritime cadets. This was marked as a significant relationship since the obtain p-value of 0.579 is more than 0.05 alpha level. Thus, the null hypothesis is rejected. This only means that the better the performance in Gadget Used, the more positive effect it has to their Online Learning. Online distance learning became the answer to the problem that both teachers and students are facing in the midst of the pandemic.

Therefore, the use of various technologies like cellphone, tablet, laptop, and many more was really in demand. Utilization of gadget used by the students is one of the big factors in the learning process of students. It can help students to accomplish different tasks through the use of different applications which are readily available and can easily be accessed. Also, gadgets can improve the knowledge of students through the efficiency of teaching methods and enough computer literacy. According to Ratnasari [14], gadget is important in the school's task of an individual because most of the professors seek for a student who has enough gadget in making research, projects and assignments. An educator utilizing different technologies during the class and when creating activities which are valuable to upgrade adequacy in educating and studying in school. Usage of devices in schooling assumes a significant part as a wellspring of learning and support the way toward figuring out how can be enjoyable, thus production of teaching measure viable and proficient to enhance the student's education results. Gadget appears to have significant effect on the students' performance. Because of this, activities made in classrooms became more flexible. The various features and functions of gadgets in class also play a part to efficiently transform teaching and learning methods through this effect different senses of students are activated through the use of these gadgets [22].

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

Key Results Area	Strategy/Projects	Persons Involved
Gadget Utilized	• Upload videos and lecture to other online platforms easily accessible by the students. • Provide link to videos or lectures compatible to any device. • Online platform must at least two applications.	1. LIMA and General Education Professors 2. Students 3. Department Chair
Internet Connectivity	• Provide an online platform that is not data consuming. • Provide more materials so that students will on that and avoid searching from net. • Upload a lecture and activities in advance so that the students can download it when they have a strong connection.	1. LIMA and General Education Professors 2. Students 3. Department Chair
Virus Protection	• Develop a course outline for activities that students will not go outside as much as possible. • As much as possible, limit the site or application as a tool for online learning to avoid viruses from downloading it. • Provide a videos or lectures from reliable source.	1. LIMA and General Education Professors 2. Students 3. Department Chair

CONCLUSION AND RECOMMENDATION

Majority of the respondents are BSMT, senior II, have utilized mobile phone for online learning and are using home WIFI for internet connectivity. Maritime students of Lyceum International Maritime Academy (LIMA) are ready in the online learning. There is a significant difference on the effect of Year Level and Internet Connectivity on the online learning readiness of maritime students when grouped according to profile variables. Program and Gadget Used turned out to be insignificant. An action plan was proposed to improve the Readiness of maritime students to online learning.

Faculty members, in collaboration with LIMA, may modify the existing syllabus by creating new learning activities that can be completed at least with a mobile phone. LIMA may organize seminars and webinars concerning in online learning by collaborating with General Education professors for faculty members and students. The higher education institutions may use the result of the study to develop an effective strategy for the online learning of the students. Future researchers may conduct study about adaptability struggle from traditional to online learning. Faculty members may develop the time management and self-motivation of the student so that they are fully ready in the online learning.

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