



# Impact of Online Classes to the Laboratory Subjects in Hospitality Management Students

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**Abstract**— The study aims to determine the impact of online classes on the laboratory subjects in Hospitality Management Students in one of the prestigious Colleges and Universities in Nueva Ecija. The participants of the study were 25 teachers and 100 Hospitality Management Students and they were selected using a purposive sampling technique. A mixed-method research design was used in order to satisfy the objectives of the study. Based on the findings of the study online laboratory classes based on the assessments made by the respondents have an impact on students' learning specifically in developing communication skills including those involved in working group has the highest weighted mean of 3.45 interpreted as "Strongly Agree". Thus, online laboratory classes were found a limited learning opportunity to engage with others, the reason why the teachers/ professors were found ways to increase students' learning engagement via social media platforms to help learners improve their learning skills and boost their confidence to showcase their talents and skills in the field they belong. On the other hand, the findings of the study based on the determinants of student's satisfaction, the structure of online laboratory classes such as flexibility of learning and quality of technology used were considered determinants of students' satisfaction on online laboratory classes. Moreover, the study found advantages and disadvantages of online laboratory classes in Hospitality Management students. On advantages, the students enhanced enthusiasm for interactive learning, increase IT literacy, ensured safe learning laboratory activities, serves as a visual aid in teaching complex concepts and laboratory activities, offers instant feedback, allows learning flexibility and affordability than the physical laboratory. On the contrary, practical skills that are expected not honed, will not provide sensory and practical experiences for the learners and students will get insensitive to failure and danger in a real-life situation.

**Keywords**— Advantages, Determinants, Disadvantages, Hospitality Management, Online Laboratory Classes

## I. INTRODUCTION

COVID-19 has created challenges to the educational system not only in the Philippines but the whole world. Because of the pandemic, the face-to-face was changed into online classes without physical interaction between teachers and students. Online classes are one of the delivery platforms in the teaching-learning process where all the lessons are delivered digitally. Online classes are self-paced and allow greater flexibility to finish the course. And it is conducted over the Internet.

Laboratory experiments play a very important role in the learning development and progress of the students because it allows them to ask questions, probe for answers, conduct investigations and collect data. The students are engaged in the investigative nature of scientific learning. They have to discover new ideas and concepts for search knowledge.

The researcher had a desire to conduct this study because as one of the Hospitality Management teachers/professors with laboratory experiments in distance learning, she observed many challenges in the teaching and learning process towards the improvement of students' skills and performance in real-life situations.

The researchers had a desire to conduct this study because as Hospitality and Management Professors, observed different challenges in online teaching and learning specifically in conducting laboratory activities.

The Philippines educational system is still facing challenges and difficulties in the delivery of quality education due to the continuous increase and effects of the global pandemic of COVID-19. According to Loike and Stoltz (2020), online in the wake of COVID-19 has given faculty members even Universities and Colleges little to no time for planning and preparation.

The online classes need to be addressed, particularly the best strategies and methodologies to educate students in all learning areas. And one of the common methods for getting students actively involved in the learning process is through laboratory classes.

Furthermore, Ramesh (2019), revealed that students can learn scientific concepts and gain new skills using virtual/online laboratories through laptops and smartphones. In this virtual laboratory, students will have the opportunity to make mistakes with minimal negative consequences compared to real laboratory experiments, thus improving student confidence in carrying out real work.

Numerous questions, problems and circumstances arise in the execution and conducting of laboratory experiment in online distance learning. One of the problems is that how the laboratory activities are conducted in standardized procedures during online learning? How does the teacher-facilitated learning ensure safety protocols and how does the student collect, investigate, and probe data if they are isolated in online learning? Online classes are one of the distance learning delivery platforms in the teaching-learning process where all the lessons are delivered digitally. It is self-paced, allowing greater flexibility to finish the course and it is conducted over the Internet.

Hospitality Management subjects like food and beverages are common features that most require experiential hands-on laboratories taught most commonly in face-to-face learning. Due to pandemics, the laboratory subjects required social distancing and shifting to online teaching and learning.

The researchers desire to investigate how the online laboratory activities in Hospitality Management had an impact on the learning skills and performance of the students.

## II. OBJECTIVES OF THE STUDY

The main objectives of the study were to determine the impact of online classes in laboratory subjects in hospitality management students.

Specifically, it would answer the following questions:

1. How may the online classes in laboratory subjects be described in terms of developing communication skills including those involved in the working groups, experiencing phenomena directly, applying concepts to new situations and solving authentic problems.
2. How may hospitality management students engage in laboratory activities during online classes?
3. What are the determinants of student satisfaction in laboratory activities during online classes?
4. What are the advantages and disadvantages of online classes for Hospitality Management Students?

## III. RESEARCH METHOD

The researcher used a mixed-method research design in order to meet the objectives of the study. The respondents are the 30 BSHM students at NEUST, particularly those with online laboratory classes Hospitality Management program. They were selected using the purposive sampling method.

The instrument used to gather the needed data were survey questionnaires and interview guide questions and were personally designed, developed and validated before data gathering.

It is also accompanied by a letter stating the purpose of the survey and interview. Since online learning, the data would be gathered through google form and were personally administered by the researchers.

The survey questionnaire consisted of a Likert scale with verbal descriptions of "Most of the times", "At all times", "Sometimes", and "Never" as choices. And the same way "Very High Impact", "High Impact", "Less Impact" and "No Impact".

And finally, the data gathered were tested and analyzed. For the quantitative data, it would be analyzed through statistical data analysis tools like weighted mean, and for qualitative data thru logical analysis.

The range of scores and their verbal interpretation is shown below:

**Table 1: Range and Verbal Interpretation Equivalent**

Point	Range	Verbal Description	Impact of Online Laboratory
4	3.25 - 4.00	Strongly Agree	Very High Impact
3	2.50 - 3.24	Agree	High Impact
2	1.75 - 2.49	Disagree	Less Impact
1	1.00 - 1.74	Strongly Disagree	No Impact



#### IV. RESULTS AND DISCUSSION

*1. Online classes in laboratory subjects be described in terms of developing communication skills including those involved in working group, experience phenomena directly, apply concepts to the new situations and solve authentic problems.*

**Table 2: Descriptions of Online Class in Laboratory Subjects**

<b>Online Class in Laboratory Subjects</b>	<b>WM</b>	<b>Verbal Description</b>	<b>Interpretation</b>
<b>developing communication skills including those involved in working group</b>	3.45	Strongly Agree	Very High Impact
<b>experience phenomena directly</b>	2.59	Agree	High Impact
<b>apply concepts to the new situations and solve authentic problem</b>	3.33	Strongly Agree	Very High Impact
<b>Overall Weighted Mean</b>	<b>3.12</b>	<b>Agree</b>	<b>High Impact</b>

Based on the data gathered by the researchers the online laboratory classes specifically in Hospitality and Management subjects, Table 2 shows the overall weighted mean got 3.12 interpreted as “Strongly Agree”. Developing communication skills including those involved in working group has the highest weighted mean of 3.45 interpreted as “Strongly Agree” while the experience phenomena directly has the lowest mean of 2.59 interpreted as “Agree”.

The findings meant that the respondent agreed that online laboratory classes had very high impact in developing communication skills of the students including those involved in working group. The online laboratory classes contribute to the retention but also provide a sense of community that is important to the students.

Same with the face-to-face classes, this online laboratory classes, communication can build links, share information, be heard and understood by the students.

The effective communication in the online laboratory classes requires a little more thought and planning than one that occurs in the classroom, due to mainly absence of body language. It is developed in timely, relevant and useful manner.

#### **2. Hospitality Management students’ engagement in laboratory activities during online classes**

Based on the data gathered from the respondents, students did not have many opportunities to engage in laboratory activities with others. That’s why, subject teachers/professors find ways to still increased students’ engagement to learn via any social media platforms.

The online environment also allows teachers/professors to harness social exchange and communications and leveraging partnership and info-sharing between the hospitality industry and hospitality educators for the students continuously develop and improve learning skills in all aspects.

Despite of different strategies and ways integrated by teachers/professors on online laboratory classes students have experiences difficulties because majority of them did not have a lot of time to converse with

one another. And in online classes the quality of interaction of other students was not that great, not all the students attend and has difficulty to communicate and interact online than in person.

### ***3. Determinants of student satisfaction in laboratory activities during online classes***

On the data gathered, the determinants of students' satisfaction in laboratory activities were satisfied on the structure of online laboratory classes flexibility and technology quality in terms of appearance, ease of use and the interaction between teachers and students towards improve their learning quality in order to achieve the expected learning competencies. And also, the implementation of clearly stated information and effective communication may contribute.

### ***4. Advantages and disadvantages of online laboratory classes to Hospitality Management Students***

The respondents the enumerated the advantages and disadvantages of online laboratory classes based on their experiences in Hospitality and Management subjects.

On advantages, the students enhanced enthusiasm for interactive learning, increase IT literacy, ensure safety learning laboratory activities, serves as a visual aid in teaching complex concepts and laboratory activities, offers instant feedback, allows learning flexibility and affordable than physical laboratory.

On the other hand, the disadvantages are practical skills that are expected not honed, it will not provide sensory and practical experiences for the learners and students will get insensitive to failure and danger in a real-life situation.

## **V. CONCLUSION AND RECOMMENDATIONS**

### ***Conclusion***

Based on the on the findings of the study, the following conclusions were drawn:

1. The respondents agreed that online laboratory classes had very high impact in developing communication skills of the students including those involved in working group.
2. The students have limited opportunities to engage in learning during online class laboratory.
3. The students were satisfied in online activities based on the structured of laboratory classes in terms of flexibility and quality of technology such as appearance, ease to use and interaction between teachers and students.
4. On the advantages of online laboratory activities, the students enhanced enthusiasm for interactive learning in more safe learning environment than in face-to-face learning but the disadvantages the students cannot honed practical skills and experiences in real-life situations.

### ***Recommendations***

Based on the findings and conclusions of the study, the researchers may recommend to continue to use interactive learning activities using social media plat form that could help students enhances their skills



and boost their confidence to participate and increase their motivation and attitude towards better learning and improved academic performance.

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