# ANALYZING THE ROLE OF CAMPUS FACILITIES IN STUDENTS' SATISFACTION AT A MARITIME HIGHER EDUCATIONAL INSTITUTION
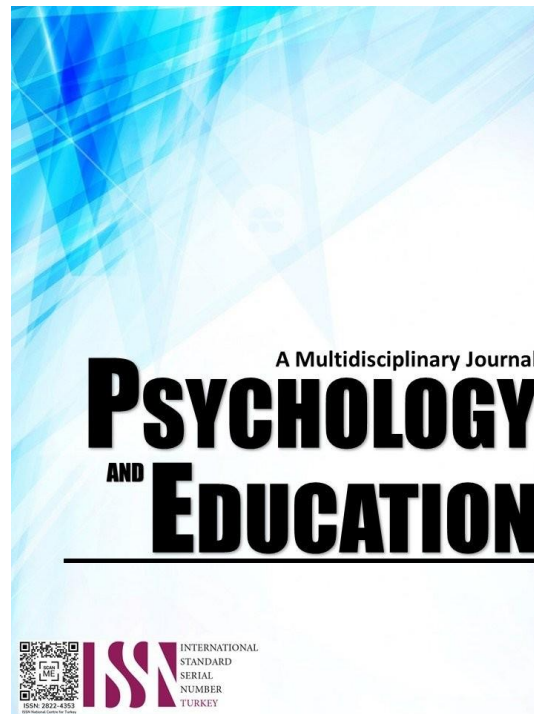
# Analyzing the Role of Campus Facilities in Students' Satisfaction at a Maritime Higher Educational Institution

Roland John Cyril F. Emague*
For affiliations and correspondence, see the last page.

**Abstract**

The research aimed to assess students' satisfaction at John B. Lacson Foundation Maritime University-Molo. The study examined the level and differences in satisfaction based on year level, place of origin, and classification (Polaris or Regular class). 50 Marine Engineering students enrolled in the school year 2016-2017 were surveyed using a standardized questionnaire. Descriptive statistics, such as mean and standard deviation, were used to analyze the data, while the t-Test for independent samples was used for inferential statistics. Overall, the facilities and services of the school were described as satisfying, with a few categories being moderately satisfying. When grouped by year level, place of origin, and classification, responses were limited to "satisfied" and "moderately satisfied" descriptions. There was no significant difference in satisfaction levels based on these factors. In conclusion, students generally found the facilities and services of the institution satisfying, with no significant differences based on year level, place of origin, and classification.

**Keywords:** *students' satisfaction, maritime institution, campus facilities*

## Introduction

School is an institution that has the role of transmitting knowledge within the society. To effectively equip the students with adequate knowledge, a school must be a place for conducive learning and must be very satisfying in view of its services, facilities, and its environment. Students as the recipient of knowledge must always feel that the school is the best place to stay with while learning and socializing. Extensive research has been conducted focusing on the factors which can affect the satisfaction and retention of students. Aldridge and Rowley, 1998 (cited in Babar and Kashif, 2010), emphasized that according to students' point of view, good quality education provides better learning opportunities and suggest that the levels of satisfaction or dissatisfaction strongly affect the student's success or failure of learning. Deshields et. al., 2005 (cited in Babar and Kashif, 2010) stated that higher education institutions are focusing on identifying and satisfying the needs and expectations of their students in terms of student academic achievement, faculty performance, classroom environment, learning facilities and institution's reputation.

Being a premier maritime university competing with other higher educational institution in the country, John B. Lacson Foundation Maritime University is trying to provide the best of everything to satisfy the needs of its students. Obtaining the Level VI in accreditation and being an ISO certified maritime school, it gains its popularity among the students who are dreaming to become successful seafarers. The school is always making sure that all the services are satisfying to further boost its popularity and reputation as a prestigious maritime educational institution. However, despite its effort to satisfy the needs of the students, there are still prevailing criticisms and feedback towards the school. In the issues of its school paper, the page intended for its "Small Voice" section is always highlighted due to the numerous positive and negative comments and feedback coming from the students. This scenario paved the way for the researcher to conduct a test of satisfaction among the Lacsonian students regarding the school where they are in. With the feedback that were read, sort of observations and some complaints that were heard, the researcher was encouraged to conduct this research within the said maritime educational institution to gain accurate information pertaining to the students' satisfaction from the services of the faculty, the administrators, management, various facilities, and the school environment.

### Research Questions

The researcher of this established research is challenged to cram on the level of students' satisfaction in a particular maritime educational institution (John B. Lacson Foundation Maritime University). The main aim of this study is to determine the level and differences of students' satisfaction when the students are classified by year level, place of origin and classification (Polaris or Regular class). This

research study specifically seeks to answer the following questions:

1. What is the level of students' satisfaction taken as a whole and when grouped according to year level, place of origin, and classification (Polaris or Regular class)?
2. Is there a significant difference in the level of students' satisfaction when grouped according to year level, place of origin, and classification (Polaris or Regular class)?

## Literature Review

### Local Studies

In the Philippines, studies have been conducted to measure student satisfaction in higher education institutions. Castano & Cabanda (2007) evaluated the efficiency and productivity growth of State Universities and Colleges (SUCs) using Data envelopment analysis (DEA) models. The results showed that SUCs had below frontier efficiency scores, indicating a need for improvement in efficiency and productivity to enhance student satisfaction.

Laguador, Villas, and Delgado (2014) focused on program accreditation in private academic institutions as a quality assurance mechanism. They found that undergoing voluntary accreditation and certification helped ensure transparency and quality in the institution's products and services. The study highlighted the initiatives and achievements of Lyceum of the Philippines University (LPU) – Batangas, emphasizing the importance of strong marketing strategies to attract more foreign students and enhance customer satisfaction.

### Foreign Studies

Numerous studies have been conducted to measure student satisfaction at the university level worldwide. For example, Navarro et al. (2005) found that teaching staff, teaching methods, and course administration were key factors influencing student satisfaction and loyalty. Yu and Dean (2001) discovered that both positive and negative emotions, along with the affective component of satisfaction, correlated with student loyalty. Factors such as retention, university image, quality of instruction, capstone experience, academic advising, overall college experience, and preparation for career or graduate school were also found to impact student satisfaction (Druzdzel & Glymour, 1995; Aldridge & Rowley, 1998; Palacio et al., 2002; Tessema, Rady & Yu, 2012; Deshields et al.,

2005; Napoli & Wortman, 1998; Aldemir & Gulcan, 2004; Mai, 2005). These studies highlight the importance of various factors in determining student satisfaction, including faculty performance, classes, university systems, and career prospects.

Overall, these studies emphasize the significance of efficiency, productivity, and quality assurance in higher education institutions to enhance student satisfaction and attract a diverse student population.

## Methodology

### Participants

The participants of the study were the officially enrolled 2nd year and 3rd year BSMarE (Bachelor of Science in Marine Engineering) students of John B. Lacson Foundation Maritime University-Molo, school year 2016-2017. The researcher utilized only 50 respondents by utilizing a quota sampling due to time constraints. The respondents were limited only to 2nd year and 3rd year Marine students because the school do not have 1st year enrollees as the effect of the K-12 curriculum while the 4th year Marine students took their 12-months apprenticeship onboard.

### Instruments of the Study

A standardized survey questionnaire was used to gather data on students' satisfaction with the school's services and facilities, specifically focusing on Marine Engineering students. The questionnaire consisted of two parts. The first part collected the respondents' profile information, including optional name, year level, place of origin, and student classification (Polaris or Regular class). The second part contained survey questions related to the level of satisfaction of Marine Engineering students regarding the school's services and facilities. The respondents rated the items using a scale of "I do not agree," "I slightly agree," "I generally agree," "I completely agree," and "No experience of the topic," with corresponding weights of 4, 3, 2, 1, and 0, respectively.

### Procedure

Data gathering was conducted by which the questionnaires were conveniently distributed among the randomly selected Marine Engineering students of JBLFMU-Molo, school year 2016-2017. The questionnaires were accomplished by the respondents, and the purpose of the questionnaire was explained to each of the respondent. Proper instructions were

written on the questionnaire and further instructions were given to the respondents to accomplish the questionnaire properly. After which, the questionnaires were gathered, and the results were tallied and interpreted to come up with the answers to the established research objectives.

**Ethical Considerations**

In conducting the study on analyzing the role of campus facilities in students' satisfaction at a maritime higher educational institution, the researcher adheres to ethical considerations. This includes obtaining informed consent from participants, ensuring confidentiality of data, allowing voluntary participation and withdrawal, protecting data, minimizing harm, obtaining Institutional Review Board (IRB) approval, and maintaining transparency and honesty in reporting findings. By following these ethical guidelines, the study was conducted responsibly, safeguarding the rights and well-being of the participants.

# Results

**Descriptive Data Analysis**

This section presents the findings on the level of students' satisfaction when taken as a whole and when grouped according to year level, place of origin and classification (Polaris or regular class).

**Level of Students' Satisfaction taken as a Whole**

Table 1. *The Level of Students' Satisfaction when Taken as a Whole*

| Categories | Mean | Sd | Description |
|---|---|---|---|
| a. Educational guidance/student counseling | 2.65 | 1.088 | Moderately satisfied |
| b. Studying arrangement | 3.03 | 0.802 | Satisfied |
| c. Studying (organization) | 2.99 | 0.895 | Moderately satisfied |
| d. Student assessment and self-assessment | 3.03 | 0.842 | Satisfied |
| e. Attitude towards students | 3.14 | 0.972 | Satisfied |
| f. Premises | 2.98 | 0.915 | Moderately satisfied |
| g. Cleaning services | 2.99 | 0.762 | Moderately satisfied |
| h. Catering/canteen services | 3.13 | 0.809 | Satisfied |
| i. Library | 3.22 | 0.830 | Satisfied |
| j. Teaching and learning (content and method) | 3.12 | 0.877 | Satisfied |
| k. Practical training period | 3.30 | 0.796 | Satisfied |

When taken as an entire group, the students were found to be "satisfied" with the following categories such as studying arrangement (M=3.03, SD=0.802), student assessment and self-assessment (M=3.03, SD=0.842), attitude towards students (M=3.14, SD=0.915), catering/canteen services (M=3.13, SD=0.809), library (M=3.22, SD=0.830), teaching and learning (content and method) (M=3.12, SD=0.877), and practical training period (M=3.30, SD=0.796). On the other hand, the students were "moderately satisfied" with the school's educational guidance/student counselling (M=2.65, SD=1.088), studying (organization) (M=2.99, SD=0.895), premises (M=2.98, SD=0.915) and cleaning services (M=2.99, SD=0.762). The following data were shown in the given table.

**Level of Students' Satisfaction when Grouped According to Year Level**

When grouped according to year level, 2ⁿᵈ year students were "satisfied" with the school's catering/canteen services (M=3.08, SD=0.846), library (M=3.02, SD=0.842) and practical training period (M=3.24 , SD=0.947) while they were "moderately satisfied" with educational guidance/student counselling (M=2.60, SD=1.044), studying (organization) (M=2.89, SD=0.945), studying arrangement (M=2.91, SD=0.829), student assessment and self-assessment (M=2.87, SD=0.944), attitude towards students (M=2.80, SD=1.062), premises (M=2.81, SD=0.918), cleaning services (M=2.86, SD=0.84) and teaching and learning (content and method) (M=2.96, SD=0.945)

Table 2. *Level of Students' Satisfaction when Grouped According to Year Level*

| Year Level | 2ⁿᵈ Year | | | 3ʳᵈ Year | | |
|---|---|---|---|---|---|---|
| Categories | Mean | Sd | Description | Mean | Sd | Description |
| a. Educational guidance/student counseling | 2.60 | 1.044 | Moderately satisfied | 2.71 | 1.131 | Moderately satisfied |
| b. Studying arrangement | 2.91 | 0.829 | Moderately satisfied | 3.16 | 0.752 | Satisfied |
| c. Studying (organization) | 2.89 | 0.945 | Moderately satisfied | 3.10 | 0.817 | Satisfied |
| d. Student assessment and self-assessment | 2.87 | 0.944 | Moderately satisfied | 3.19 | 0.694 | Satisfied |
| e. Attitude towards students | 2.80 | 1.062 | Moderately satisfied | 3.47 | 0.734 | Satisfied |
| f. Premises | 2.81 | 0.918 | Moderately satisfied | 3.14 | 0.853 | Satisfied |
| g. Cleaning services | 2.86 | 0.841 | Moderately satisfied | 3.12 | 0.663 | Satisfied |
| h. Catering/canteen services | 3.08 | 0.846 | Satisfied | 3.22 | 0.771 | Satisfied |
| i. Library | 3.02 | 0.842 | Satisfied | 3.42 | 0.764 | Satisfied |
| j. Teaching and learning (content and method) | 2.96 | 0.945 | Moderately satisfied | 3.29 | 0.782 | Satisfied |
| k. Practical training period | 3.24 | 0.947 | Satisfied | 3.37 | 0.598 | Satisfied |

On the other hand, 3rd year students were "satisfied" with most of the given categories such as studying arrangement (M=3.16, SD=0.752), studying (organization) (M=3.10, SD=0.817), student assessment and self-assessment (M=3.19, SD=0.694), attitude towards students (M=3.47, SD=0.734), premises (M=3.14, SD=0.853), cleaning services (M=3.12, SD=0.663), catering/canteen services (M=3.22, SD=0.771), library (M=3.42, SD=0.764) and practical training period (M=3.37, SD=0.598) however, in view of educational guidance/student counseling (M=2.71, SD=1.131), students were "moderately satisfied".

**Level of Students' Satisfaction when Grouped According to Place of Origin**

When grouped according to the place of origin, students coming from rural areas were found to be "satisfied" in various categories such as studying arrangement (M=3.04, SD=0.833), studying (organization) (M=3.02, SD=0.919), attitude towards students (M=3.14, SD=0.867), student assessment and self-assessment (M=3.05, SD=0.886), premises (M=3.03, SD=0.900), cleaning services (M=3.10, SD=0. 789), catering/ canteen services (M=3.14, SD=0.858), library (M=3.23, SD=0.796), teaching and learning (content and method) (M=3.12, SD=0.946), and practical training period (M=3.27, SD=0.891) while in view of educational guidance/student counseling (M=2.60, SD=0.947), they were found to be "moderately satisfied".

Table 3. *Level of Students' Satisfaction when Grouped According to Place of Origin*

| Place of Origin | | Rural | | | Urban | | |
|---|---|---|---|---|---|---|---|
| | Categories | Mean | Sd | Description | Mean | Sd | Description |
| a. | Educational guidance/student counseling | 2.60 | 0.947 | Moderately satisfied | 2.74 | 1.227 | Moderately satisfied |
| b. | Studying arrangement | 3.04 | 0.833 | Satisfied | 3.02 | 0.758 | Satisfied |
| c. | Studying (organization) | 3.02 | 0.919 | Satisfied | 2.95 | 0.196 | Moderately satisfied |
| d. | Student assessment and self-assessment | 3.05 | 0.886 | Satisfied | 2.99 | 0.774 | Moderately satisfied |
| e. | Attitude towards students | 3.14 | 0.867 | Satisfied | 3.13 | 1.136 | Satisfied |
| f. | Premises | 3.03 | 0.900 | Satisfied | 2.88 | 0.933 | Moderately satisfied |
| g. | Cleaning services | 3.10 | 0.789 | Satisfied | 2.82 | 0.698 | Moderately satisfied |
| h. | Catering/canteen services | 3.14 | 0.858 | Satisfied | 3.11 | 0.734 | Satisfied |
| i. | Library | 3.23 | 0.796 | Satisfied | 3.20 | 0.878 | Satisfied |
| j. | Teaching and learning (content and method) | 3.12 | 0.946 | Satisfied | 3.13 | 0.769 | Satisfied |
| k. | Practical training period | 3.27 | 0.891 | Satisfied | 3.36 | 0.615 | Satisfied |

However, satisfaction among students coming from the urban areas somehow shows differently. Students coming from urban areas were found to be "satisfied" in view of studying arrangement (M=3.02, SD=0.758), attitude towards students (M=3.13, SD=1.136), catering/canteen services (M=3.11, SD=0.734), library (M=3.20, SD=0.878), teaching and learning (content and method) (M=3.13, SD=0.769) and practical training period (M=3.36, SD=0.615) while educational guidance/student counseling (M=2.74, SD=1.227), studying (organization) (M=2.95, SD=0.196), student assessment and self- assessment (M=2.99, SD=0.774), premises (M=2.88, SD=0.933), and cleaning services (M=2.82, SD=0.698), they were "moderately satisfied".

**Level of Students' Satisfaction when Grouped According to Classification (Polaris or Regular Class)**

When grouped according to classification, the Polaris students were "satisfied" in view of studying arrangement (M=3.46, SD=0.752), student assessment and self-assessment (M=3.02, SD=0.903), attitude towards students (M=3.18, SD=0.906), cleaning services (M=3.16, SD=0.744), catering/canteen services (M=3.16, SD=0.821), library (M=3.27, SD=0.781), teaching and learning (content and method) (M=3.13, SD=0.948), and practical training period (M=3.33, SD=0.788). However, Polaris students were "moderately satisfied" in view of educational guidance/student counseling (M=2.50, SD=1.090), studying (organization) (M=2.94, SD=1.007), and premises (M=3.00, SD=0.970).

On the other hand, regular students were described to be "satisfied" in the following categories such as studying (organization) (M=3.05, SD=0.764), student assessment and self-assessment (M=3.04, SD=0.786), attitude towards students (M=3.09, SD=1.025), catering/canteen services (M=3.10, SD=0.800), library (M=3.16, SD=0.865), teaching and learning (content and method) (M=3.11, SD=0.806), and practical training period (M=3.28, SD=0.808). However, in view of educational guidance/student counseling (M=2.80, SD=1.076), studying arrangement (M=2.95, SD=0.849), premises (M=2.95, SD=0.860), and cleaning services (M=2.82, SD=0.754) students from regular class were "moderately satisfied". The following data were shown in the given table.

Table 4. *Level of Students' Satisfaction when Grouped According to Classification (Polaris or Regular Class)*

| | Classification | Polaris | | | Regular | | |
|---|---|---|---|---|---|---|---|
| | Categories | Mean | Sd | Description | Mean | Sd | Description |
| a. | Educational guidance/student counseling | 2.50 | 1.090 | Moderately satisfied | 2.80 | 1.076 | Moderately satisfied |
| b. | Studying arrangement | 3.46 | 0.752 | Satisfied | 2.95 | 0.894 | Moderately satisfied |
| c. | Studying (organization) | 2.94 | 1.007 | Moderately satisfied | 3.05 | 0.764 | Satisfied |
| d. | Student assessment and self-assessment | 3.02 | 0.903 | Satisfied | 3.04 | 0.786 | Satisfied |
| e. | Attitude towards students | 3.18 | 0.906 | Satisfied | 3.09 | 1.025 | Satisfied |
| f. | Premises | 3.00 | 0.970 | Moderately satisfied | 2.95 | 0.860 | Moderately satisfied |
| g. | Cleaning services | 3.16 | 0.744 | Satisfied | 2.82 | 0.754 | Moderately satisfied |
| h. | Catering/canteen services | 3.16 | 0.821 | Satisfied | 3.10 | 0.800 | Satisfied |
| i. | Library | 3.27 | 0.781 | Satisfied | 3.16 | 0.865 | Satisfied |
| j. | Teaching and learning (content and method) | 3.13 | 0.948 | Satisfied | 3.11 | 0.806 | Satisfied |
| k. | Practical training period | 3.33 | 0.788 | Satisfied | 3.28 | 0.808 | Satisfied |

## Inferential Data Analysis

t-Test for independent samples as the statistical tool for Inferential data analysis was utilized to determine the significant difference of the students' level of satisfaction when grouped according to year level, place of origin and classification (Polaris or regular class).

Significant Difference when Grouped According to Year Level. When the level of satisfaction of 2nd year and 3rd year students were compared, the t-test for independent samples resulted to a significant value of 0.438 which is greater than the required value of 0.05 alpha. Therefore, there is no significant difference in the students' level of satisfaction when grouped according to year level. The null hypothesis was not rejected. The following data were shown in the given table.

Table 5. *t-Test Results of the Significant Difference in the Students' Level of Satisfaction as Classified According to Year Level*

| Year Level | N | Mean | SD | t-value (F) | Sig. |
|---|---|---|---|---|---|
| 2nd Year | 25 | 2.91 | 0.928 | 1.645 | 0.438 |
| 3rd Year | 25 | 3.20 | 0.778 | | |

*p<.05

## Significant Difference when Grouped According to Place of Origin

When the levels of satisfaction among students coming from rural and urban area were compared, the t-test for independent samples resulted to a significant value of 0.441 which is greater than the required value of 0.05 alpha. Therefore, there is no significant difference in the students' level of satisfaction when grouped according to year level. The null hypothesis was accepted. The following data were shown in the given table.

Table 6. *t-Test Results of the Significant Difference in the Students' Level of Satisfaction as Classified According to Place of origin*

| Place of Origin | N | Mean | SD | t-value (F) | Sig. |
|---|---|---|---|---|---|
| Rural | 31 | 3.07 | 0.876 | 1.141 | 0.441 |
| Urban | 19 | 3.03 | 0.793 | | |

*p<.05

## Significant Difference when Grouped According to Classification (Polaris or Regular Class)

When the level of satisfaction between Polaris and regular class were compared, the t-test for independent samples resulted to a significant value of 0.507 which is greater than the required value of 0.05 alpha. Therefore, there is no significant difference in the students' level of satisfaction when grouped according to their classification. The null hypothesis was accepted. The following data were shown in the given table.

Table 7. *t-Test Results of the Significant Difference in the Students' Level of Satisfaction as Classified According to Classification (Polaris or Regular Class)*

| Classification | N | Mean | SD | t-value (F) | Sig. |
|---|---|---|---|---|---|
| Polaris | 25 | 3.20 | 0.883 | 1.144 | 0.507 |
| Regular | 25 | 3.03 | 0.854 | | |

*p<.05

## Discussion

The study findings indicate that students expressed satisfaction with categories such as studying arrangement, student assessment and self-assessment, attitude towards students, catering/canteen services, library, teaching and learning (content and method), and practical training period. However, they were moderately satisfied with educational guidance/student counseling, studying (organization), premises, and cleaning services. When examining the data by year level, 2nd year students showed satisfaction with catering/canteen services, library, and practical training period, while being moderately satisfied with

---

other categories. 3rd year students were satisfied with most categories, except for educational guidance/student counseling. The study also revealed differences in satisfaction levels based on place of origin and classification, but no significant differences were found across year level, place of origin, and classification. These findings provide insights into the overall satisfaction levels of students and highlight areas where improvements can be made to enhance their experience and addressing specific areas of concern.

## Conclusion

Based on the given results, it can be concluded that students generally expressed overall satisfaction with various aspects of the school. They were particularly satisfied with studying arrangement, student assessment, attitude towards students, catering/canteen services, library, teaching and learning, and practical training period. This can be attributed to the availability of facilities, resources, competent instructors, and effective assessment techniques. However, students reported moderate satisfaction with the school's educational guidance/student counseling, studying organization, premises, and cleaning services. This may be due to a lack of awareness or limited experience with these services, or negative past experiences.

It is important to note that 2nd-year students expressed satisfaction with specific areas such as catering/canteen services, library, and practical training period. They were moderately satisfied with other aspects, indicating that they may not have fully utilized all the facilities and services offered by the school yet. On the other hand, 3rd-year students were satisfied with most categories, including studying arrangement, studying organization, student assessment and self-assessment, attitude towards students, premises, learning services, catering/canteen services, library, and practical training period. However, they were moderately satisfied with educational guidance/student counseling. This could be because they have had more exposure and experience with the school's services and facilities, leading to greater satisfaction overall.

Moreover, it can be concluded that students from rural areas expressed satisfaction with various categories, including studying arrangement, studying organization, attitude towards students, student assessment and self-assessment, premises, cleaning services, catering/canteen services, library, teaching

and learning, and practical training period. However, they were moderately satisfied with educational guidance/student counseling. This suggests that students from rural areas have simpler expectations and may find the services and facilities provided by the maritime institution better than what they are accustomed to in rural schools. On the other hand, students from urban areas were satisfied with studying arrangement, attitude towards students, catering/canteen services, library, teaching and learning, and practical training period. However, they were moderately satisfied with educational guidance/student counseling, studying organization, student assessment and self-assessment, premises, and cleaning services. This indicates that students from urban areas have higher expectations and are more familiar with efficient services and facilities in urban schools.

Additionally, the research also highlights the differences in satisfaction levels between Polaris students and Regular students. Polaris students expressed satisfaction with studying arrangement, student assessment and self-assessment, attitude towards students, cleaning services, catering/canteen services, library, teaching and learning, and practical training period. However, they were moderately satisfied with educational guidance/student counseling, studying organization, and premises. This suggests that Polaris students have higher expectations and are more aware of the school's services and facilities. On the other hand, regular students were satisfied with studying organization, student assessment and self-assessment, attitude towards students, catering/canteen services, library, teaching and learning, and practical training period. However, they were moderately satisfied with educational guidance/student counseling, studying arrangement, premises, and cleaning services. Regular students may have lower expectations and are less particular about certain services and facilities.

In summary, the research suggests that the school's academic and support services are generally satisfactory, with some areas needing improvement. Efforts should be made to address areas of moderate satisfaction, improve educational guidance/student counseling, studying organization, premises, and cleaning services. All students should have equal access to facilities and services. Students from rural areas are generally satisfied, while those from urban areas have higher expectations. The institution should consider these differences and address areas of moderate satisfaction. Polaris students have higher expectations, while regular students are generally satisfied. The institution should cater to the specific

needs of both groups. Additionally, there is no significant difference in student satisfaction based on year level, place of origin, or classification. Student evaluations can vary regardless of their status.

## References

Aldemir, C., and Gulcan, Y. (2004). Student Satisfaction in Higher Education: A Turkish Case. Higher Education Management and Policy, v16 n2 p109-122 2004. https://eric.ed.gov/?id=EJ852992

Aldridge, S. and Rowley, J. (1998). Measuring Customer Satisfaction in Higher Education. Quality Assurance in Education, Vol. 6 Issue: 4, pp.197 – 204. http://www.emeraldinsight.com/doi/pdfplus/10.1108/096848898102 42182.

Babar, Z. B., and Kashif, R. (2010). A Study Examining the Students Satisfaction in Higher Education. Procedia - Social and Behavioral Sciences, Vol. 2, Issue: 2, pp5446–5450. http://www.sciencedirect.com/science/article/pii/S18770428100092 86

Castano,M. N., and Cabanda E.(2007). Sources Of Efficiency and Productivity Growth in The Philippine State Universities and Colleges: A Non-Parametric Approach. International Business & Economics Research Journal (IBER), Vol 6, No 6. http://cluteinstitute.com/ojs/index.php/IBER/article/view/3379.

Druzdzel, M. J., and Glymour, C. (1995). Having the Right Tool: Causal Graphs in Teaching Research Design. http://www.cmu.edu/dietrich/philosophy/docs/glymour/glymourdruz dzel95- 2.pdf

Laguador, C. et. al. (2014). The Journey of Lyceum of the Philippines University-Batangas Towards Quality Assurance and Internationalization of Education. Asian Journal of Educational Research Vol. 2, No. 2, 2014 ISSN 2311-6080. http://www.multidisciplinaryjournals.com/wp-content/uploads/2014/ 10/THE- JOURNEY-OF-LYCEUM-OF-THE-PHILIPPINES-UNIVERSITY-BATANGAS- TOWARDS-QUALITY-ASSURANCE-AND-INTERNATIONALIZATION-OF-EDUCATION.pdf

Napoli, A.R. and Wortman, P.M. (1998). Psychosocial Factors Related to Retention and Early Departure of Two-Year Community College Students. Research in Higher Education, vol. 39, Iss: 4, pp 419–455. http://link.springer.com/article/10.1023/A%3A1018789320129

STCW Circular No. 2015-04. (2015). Definition of Maritime Higher Educational Institution. http://stcw.marina.gov.ph/wp-content/uploads/2016/02/STCW-Circular-No.-2015-04-Monitoring.pdf

## Affiliations and Corresponding Information

**Roland John Cyril F. Emague**
John B. Lacson Foundation Maritime University
Molo, Inc., Philippines