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EMPLOYABILITY OF MARITIME GRADUATES OF LYCEUM OF THE PHILIPPINES UNIVERSITY FROM 2007 – 2011

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## **ABSTRACT**

This study primarily determined the factors associated with the job placement of the graduates of Marine Transportation and Marine Engineering of Lyceum of the Philippines University in Batangas from 2007 - 2011. Descriptive type of quantitative research method was used in the study. Results showed that there were 817 BSMT graduates or 80.73 out of 1,012 and 146 BSMarE graduates or 81.11 percent out of 180 surveyed respondents are presently employed during the time of data gathering wherein their first jobs are related to Maritime Program with almost 1 to 6 months of job search employed in international shipping industries and cruise line and tourism vessels. Graduates found communication skills as one of the competencies which is very useful in their first job. The skill in basic safety is considered the number one very relevant and important competence in the marine transportation curriculum.

Keywords: Maritime Profession, Work Values, Engineering, Lyceum, Employability

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### Introduction

As the manning capital of the world, the Philippines supplies almost every vessel that sails the seven seas with Filipino marines and marine engineers on board. These Filipinos are employed because of their education and capabilities. However, the extent to which they remain competitive, given the increasing demands of the global market, is the accountability of quality education [1].

Graduates' employability is one of the ultimate goals of higher educational institutions' (HEIs) effort of providing quality in all their endeavours. HEIs try to ensure that their graduates would be part of the larger community of professionals who contribute to the development of their respective field of specializations and organizations and who fulfil their duties and responsibilities with utmost diligence to ethical standards and respect towards co-workers.

In that sense, academic institutions of higher learning must provide an updated curriculum, modern facilities and efficient student services as response to the needs of professional education and society particularly in maritime and shipping industries. Educators must also possess effective teaching techniques and strategies to ensure and maximize the learning of the students. The products being produced by universities and colleges can be measured through the quality of their graduates and one of these measures is by means of employment [2].

This tracer study will determine the employment status of BS Marine Transportation and BS Marine Engineering Graduates of Lyceum of the Philippines University (LPU) from 2007-2011. It will also assess the relevance of the BSMT and BSMarE curricula, knowledge, skills and attitude acquired by the graduates deemed to be relevant for their employment; identify the personal and professional characteristics and job placement of Maritime Graduates and the school-related factors associated with their employment. It is a part of the mission of LPU in Batangas City to provide the students an equal growth and opportunity more than what the other universities and colleges can offer to their students and the appropriate application of skills that would be well-suited to the graduates' future employment.



The findings of the study will serve as the basis for the college to improve, update or enhance the curricula of BSMT and BSMarE programs and services to make these more responsive to the needs of the community and shipping industries. The usefulness/relevance of the school program will be measured by the employment opportunities granted to the graduates, their present positions and the nature and the relevance of the jobs they obtained immediately after graduation.

## **Objectives of the Study**

This study primarily determined the factors associated with the job placement of the graduates of Marine Transportation and Marine Engineering of Lyceum of the Philippines University in Batangas from 2007 - 2011. Specifically, this study determined the job placement profile of the respondents in terms of present employment, reasons if unemployed, employment status, nature of employment, present occupation, place of work, reasons for staying a job, length of job search, reasons for accepting the job, reasons for changing the job, means of job search, job level position and initial gross monthly earning. To identify the skills and work-related values which contributed in meeting the demands of the present job and to analyze the relevance of the curricula were also investigated. The findings of the study served as basis to propose an action plan to improve the employment rate of BSMT and BSMarE Graduates of LPU and enhance the relevance of the curricula of the two programs under study.

#### **Materials and Method**

This tracer study used descriptive research design. Descriptive survey method is appropriate for data derived from simple observational situations, whether these are actually physically observed or observed through the use of a questionnaire or poll techniques [3]. The study used 1,012 or 80.96 percent of BSMT graduates and 178 or 100 percent of BSMarE graduates served as respondents. Convenience sampling technique was used to gather data due to the difficulty of sending to and retrieving questionnaires from the BSMT graduates. Survey questionnaire was used as the main instrument of this study. The questionnaire consists of three parts: the job placement of the respondents, relevance of school related factors to the job placement of the respondents, skills

developed by LPU and work – related values. The Lyceum Research and Statistics Center provided the survey questionnaire for this study. Some parts of the instrument were modified to become more suitable to the nature of employment of the respondents.

The respondents were informed on the purpose of the study and were invited to participate. The researchers administered some of the questionnaires personally, others were sent through email and social networking sites. In more than 1,200 questionnaires sent to the BSMT graduates only 1,012 responded and retrieved while for BSMarE, 100 percent of the respondents replied to the phone calls, text messages and social networking media through private messages. The data collected were classified, tabulated and coded for analysis. Frequency count, percentage, weighted mean and rank were the statistical tools employed in interpreting the data obtained from the survey.

#### **Results and Discussion**

Getting employed is the primary goal of every college graduate who seeks to apply and develop more of his knowledge, skills and values in various work environments that could provide healthy competition among the members of the organization and wealthy opportunities for professional and personal growth.

Table 1 presents the frequency distribution of Marine Transportation and Marine Engineering graduates in terms of their employment data.

Table 1

Frequency Distribution of BSMT and BSMarE Graduates In Terms of Employment Data

Present Employment	BSMT		BSMarE	
	F	%	F	%
Presently Employed	817	80.73	146	81.11
Previously Employed	165	16.30	26	14.44
Never Employed	30	2.96	8	4.44
Total	1012	100.00	180	100.00

Reason of Unemployment	$\mathbf{F}$	%	$\mathbf{F}$	%
Advance or further study	15	7.69	5	14.71
Self-motivation	86	44.10	24	70.59
Family concern and decided not	59	20.26	22	64.71
to find a job		30.26		
Health-related reason(s)	46	23.59	16	47.06
No job opportunity	58	29.74	18	52.94
Did not look for a job	28	14.36	16	47.06
Lack of work experience	39	20.00	9	26.47
Present Employment Status	F	%	F	%
Regular or Permanent	108	13.22	25	17.12
Contractual	634	77.60	108	73.97
Reliever	64	7.83	9	6.1 <mark>6</mark>
Self-employed	11	1.35	4	2.74
Total	817	100	146	100
Nature of Employment	F	%		
Gainfully employed	785	96.08	133	91.10
Self-employed	11	1.35	4	2.74
Underemployed	21	2.57	9	6.16
Total	817	100	146	100

There were 80.73 percent and 81.11 percent employed BSMT and BSMarE graduates, respectively, during the time of data gathering. Some of them started their own business and others began to build their families and try the other job opportunities in manufacturing industries as production staff and operators.

Self – motivation to pursue their career in maritime is the foremost reason of the most of the unemployed surveyed graduates followed by family concern decided not to find a job and no job opportunity. Based on the interviews conducted by the researchers to the LIMA faculty members, some of the graduates were found to have lack of motivation to practice their profession because some of the students were not interested to work in maritime industry

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wherein they need to leave their respective families for couple of months or years. They are still in the process of understanding the nature of their profession, until such time they realize the benefits of being seafarer.

Six hundred thirty-four (634) or 77.60 of the BSMT respondents landed on contractual status while 60 percent of the BSMarE graduates and 13.22 percent are already regular or permanent among BSMT respondents. There are 96.08 percent gainfully employed BSMT graduates and 91.10 percent for the BSMarE respondents Enrolling in advance studies is the least reason of unemployed graduates sometimes due to financial constraints.

The result implies that the Maritime graduates are really making great contributions to the financial needs of their respective families. They are already reaping the fruits of their labor from studying for many years and now, they are considered truly professionals.

Majority of both groups of respondents were employed internationally which comprised of 618 or 75.64 percent and 118 or 80.81 percent of BSMT and BSMarE graduates, respectively, while 199 BSMT or 24.36 percent and 28 or 19.18 percent of the surveyed BSMarE graduates were employed locally.

# Reasons for Staying on the Job

Various reasons were considered in staying for a job which served as extrinsic or intrinsic motivators to pursue their professional careers in an organization. Salaries as well as the benefits is the number one reason of the surveyed respondents for staying on the job followed by career challenge and relatedness to special skill. Some answered that the relevance of the program to their present job is the reason of 49.20 percent BSMT respondents for staying in the job and 65.75 percent of the BSMarE while proximity to residence is the reason of 26.56 percent BSMT.

The least group of BSMT respondents answered family influence and peer influence are the reasons of 79 or 9.67 percent and 67 or 8.20 percent surveyed graduates, respectively, while peer influence and proximity to residence are the reasons of 36 or 24.66 and 25 BSMarE



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graduates or 17.12 percent, respectively. The salary and employee benefits being provided by the organization served as a major role in recruiting, retaining, and motivating staff. Although salary and benefits are not the "most" important aspect of the jobs, they definitely contribute to recruiting, retaining, and motivating superior employees [4].

## Length of Job Search and Reasons for Accepting the Job

There were 402 BSMT respondents or 49.20 percent who obtained their jobs for almost 1 to 6 months followed by the group of 287 respondents or 35.13 percent from 7 to 11 months and 79 or 9.67 percent from 1 year to less than 2 years. The least group of respondents have length of job search varies from 2 years to less than 3 years; 3 years to less than 4 years and less than a month which comprised of 23 or 2.82 percent, 14 or 1.71 percent and 12 or 1.47 percent, respectively.

Eighty (80) BSMarE respondents or 54.79 percent obtained their jobs for almost 1 to 6 months followed by the group of 33 respondents or 2.60 from 7 to 11 months and 17 or 1.64 percent from less than a month. The least groups of respondents with length of job search varies from 2 years to less than 3 years; 1 year to less than 2 years, and 3 years to less than 4 years which comprised of 8 or 5.48 percent, 5 or 3.42 percent and 3 or 2.05 percent, respectively.

There were 88.62 percent who answered that the relevance of their special skills to present employment is the reason of the majority for accepting the job followed by 75.64 percent who responded career challenge and 72.71 percent answered salaries and benefits. Since it is the job of 58.63 percent of the surveyed graduates which then became their reasons for accepting the job while 23.13 percent of the respondents believed that they enjoyed the job and the least group of 7.96 percent answered proximity to residence.

One-hundred four (104) of the BSMarE graduates or 71.23 percent answered that the relevance of their special skills to present employment is their reason for accepting the job followed by 66.44 percent who responded salaries and benefits while 63.01 percent answered career challenge. Since it is the first job of 46.58 percent of the surveyed graduates which then



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became their reasons for accepting the job while 35.62 percent of the respondents replied that they are enjoying the job and the least group of 18.49 percent answered proximity to residence. Relevance to special skills provides confidence for the Maritime graduates to accept the tasks being assigned to them. They are equipped with the knowledge and expertise that are considered useful in performing their duties and responsibilities.

## **Reasons of Changing Job**

The reason of the 48.23 percent of the BSMT employed graduates for changing their jobs is the salaries and benefits while the group of 32.93 percent is career challenge while proximity to residence is for the group of 15.30 percent of the surveyed graduates. Change of residence or migration is the reason of 12.85 and not being related to special skills for 7.59 percent of the respondents.

Among the BSMarE employed graduates, there were 72.60 percent changed their jobs due to the salaries and benefits while the group of 65.75 percent is career challenge while change of residence/migration is for the group of 33.56 percent of the surveyed graduates. Proximity to residence is the reason of 23.29 and not related to special skills for 14.38 percent. Good salaries and benefits served as extrinsic motivators that encourage most employees to stay in their jobs and if not provided could also be the cause for leaving their present employers since they are still looking for companies that could offer them higher salaries and appropriate benefits.

## Finding the First Job

The respondents found their first jobs through shipboard training as certified by the frequency count of 344 BSMT graduates or 42.11 percent and 57 BSMarE or 39.04 percent followed by the assistance of school's job placement office through Memorandum of Understanding (MOU) and Memorandum of Agreement (MOA) with 275 or 33.66 percent of BSMT and 26.71 percent of BSMarE while 10.16 BSMT respondents. Looking for employment opportunities would somehow be very difficult in the part of the fresh graduates especially when they do not know how the world of work be discovered without any assistance from people

around them. The reason why the university offers different programs and activities that would make job seeking easier for its graduates.

#### **Job Level Position**

Nearly half of the respondents with 45.29 percent were ordinary seaman as their job level position followed by the group of respondents with job position of able bodied seaman with 24.36 percent and OIC position with 22.89 percent. There were only 3.92 percent and 0.49 percent having job level positions of 3<sup>rd</sup> Mate and 2<sup>nd</sup> Mate, respectively. There were 25 other positions not related to maritime professions which include positions related to manufacturing industries.

Among the BSMarE employed graduates, there were 38.36 percent employed as ordinary seaman followed by able bodied seaman and OIC. There were 8.22 percent 3/Engineers and 2.05 percent 2/Engineers. There were also 8.22 percent with job level positions not related to maritime profession such as factory operators and supervisors. There is a need for synergy among all sectors to enhance competitiveness in basic maritime professional skills, and also in creating added value that will make the seafarers more competitive, such as language skills and improved work ethics [5].

## **Gross Monthly Income**

Four hundred seven (407) or 49.82 percent of the BSMT respondents were already earning P101,000 – 200,000 followed by the group of 198 respondents or 24.24 percent who are earning P 200,001 – 300,000 while 97 or 11.87 percent of the respondents have gross monthly earning of P 300,001 – 400,000. Fifty-one (51) or 6.24 percent of the surveyed respondents are receiving their salary from P 400,001 – 500,000 while 32 or 3.92 percent have more than P 500,000. Few of them are receiving less than P50,000 and P 50,000 – 100,000 which comprised of 18 or 2.20 percent and 14 or 1.71 percent, respectively.

There were 71 BSMarE employed graduates or 48.63 percent who are receiving P101,000 - 200,000 followed by the group of 36 respondents or 24.66 percent who are earning

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P 50,000 – 100,000 while 12 or 8.22 percent of the respondents have gross monthly earning of less than P 50,000.

Deck officers who work on ships involved in the oil and gas extraction industry, in freight transportation or on scientific research vessels earn higher wages than merchant marines in other industries [6].

## **Competencies Learned in College**

Surveyed respondents found communication skills as one of the competencies which they believed very useful in their first job. According to the wisegeek.com, in order to become an ordinary seaman, it can help to have some specific skills and characteristics.

A great deal of knowledge about seamanship is not typically necessary, since these jobs tend to involve a lot of on-the-job training. It is important to be in good physical condition though, and they should also have the ability to understand and carry out complex instructions. Good organization skills and communication abilities are also important, as they will typically work in all different areas of the ship.

Efficient communication between maritime professionals is an important factor for a safe and efficient operation onboard. If you are a watch keeper, you must clearly communicate all kinds of operations and problems/ suspicions with your seniors and crew members. An efficient engine room-bridge communication is also very important to make sure that navigational officers at the bridge can plan their procedures or stay prepared for any kind of situation [7].

Information technology skill is very useful to their employment according to the 67.3 percent of the BSMT graduates and 65.07 of the BSMarE graduates because this is very important to make some ship operations really work well. Information technology has become an essential part of the rapid and accurate transfer and processing of enormous volumes of data processed in international transport firms and port organizations. The proper management of

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systems, which process this information and communicate it to those who manage port operations, is vital for efficient transport [8].

Human relation skill is also considered very useful by the 61.8 percent and 58.22 percent of the BSMT and BSMarE respondents, respectively. Almost half of the BSMT surveyed graduates or 55.1 percent and 97 BSMarE or 66.44 percent considered problem solving skills to be one of the useful competencies learned in college as well as critical thinking skills. These are being utilized by the respondents in answering the demands and challenges of the day-to-day activities on their respective work places. It is always necessary to develop these skills to boost their self-confidence and resourcefulness that would make them successful in dealing and giving answers to problems in the work environment.

However, entrepreneurship skill was considered the least useful among the listed indicators because this was not emphasized in the curriculum of BS Marine Transportation and BS Marine Engineering.

#### **Work Related Values**

Number one in the LPU Core Values is also the number one work related values of Marine Transportation and Marine Engineering graduates that contribute much in meeting the demands of their present employment followed by perseverance and hard work. Employed graduates are now getting involved in an environment which needs hard working professionals who are committed to serve shipping companies whatever policy or condition might the employers have. Perseverance or determination of the graduates to reach their dreams served as their strong foundation and stepping stone to get employed and earn a living not only for themselves but also for their family. For these graduates, after Love for God, hard work and perseverance are two important work values that should possess by the future marine professionals along with the other values mentioned. It is one of the core values being instilled by the LPU professors to their students which significantly contribute to the future employment of the graduates.

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The value of honesty and love for truth also contributed very much to the present employment of the Maritime graduates as well as professional integrity, obedience to superior, efficiency, punctuality and courage.

The significance of honesty would never be taken away in all aspects of life. A person who really values the love for truth could always keep doing things in the most appropriate manner which geared towards the attainment of professional integrity. Obedience of the students to their professors helped them build a strong character of complying with all the requirements and demands of their immediate superiors. The courage to surpass the challenges of their profession makes them more efficient and effective assets of their respective companies.

When other principles are tested, it's courage that prevents them from crumbling. It isn't ignoring fear, but being stronger than fear. Courage is the guardian of all other values. It is there when times are toughest, when difficult decisions have to be made. It takes the form of mental, physical and ethical strength, and is found in the backbone of every Marine [9].

Fairness and justice contributed much to the present employment of Marine Transportation graduates followed by nationalism, love for co-workers, unity and leadership. The practice of fairness and justice also helped them build a strong character of a leader who is nationalistic with sense of unity and love for co-workers. Creativity and innovativeness, supportiveness and tolerance were the least work-values that contributed much to their employment.

Unity of their ideas to keep their team working is another mind-setting which let them prove that they are really qualified in the position while their creativity and innovativeness brought them up to stand out among the employees who have the necessary skills but never discovered their talents, ingenuity and resourcefulness. Loving is also showing their care for coworkers through giving their words of concern and sympathy while their leadership always takes them to become winners.

The cited work values contributed much to the present employment of the Marine Transportation graduates as well as to the Marine Engineering while the aforementioned work related values contributed much to the present employment of the graduates. Developing the right attitude of the students really helped them a lot in achieving their goals and dreams to become successful marine professionals.

#### **Relevance of the Curriculum**

The Maritime English and Literature subjects obtained the highest total weighted mean score of 3.52 which is considered very relevant to their job placement followed by the Computer Subjects with 3.44, Mathematics subjects with 3.31 and natural Sciences with 3.22. The least rated relevant subjects were the Physical Education and Social Sciences with total weighted mean scores of 3.14 and 3.04, respectively. Good command of English Language in shipping industry could provide clear instructions and directions to the crews and staff inside the vessel. It could prevent untoward incidents due to misunderstanding and misinterpretation on the way orders were received uncertainly from ambiguous delivery of the message.

Mathematics is also equally important for seafarers. They used mathematics in marine navigation wherein they need to provide solutions to some common problems that mariners deal with when cruising and in pre-cruise planning. Meanwhile, skill in using computer is also necessary to operate some of the digital equipment and machines inside the vessels.

Communication skill is basically needed by all staff and crews in the shipping vessel while mathematics is very important for ship's navigators usually second mates. IMO regulations require the officer be fluent in English. This is required for a number of reasons, such as to use charts and nautical publications, understand weather and safety messages, communication with other ships and coast stations, and to be able to work with a multi-lingual crew.

The skills in basic safety is considered the number one very relevant and very important competence should marine transportation graduates should possess which obtained a weighted mean score of 3.81 followed by Deck Watch Keeping, Seamanship, Navigation and Global Maritime Distress and Safety System (GMDSS).

Ship handling and Maneuvering as well as Marine Pollution were also considered very relevant. International Aeronautical and Maritime Search and Rescue (IAMSAR) and Meteorology and Oceanography obtained the least weighted mean scores which are considered

relevant to the job placement of the Marine Transportation graduates. The computed composite mean score of 3.61 implies that the professional subjects are very relevant to the job placement of the Marine Transportation graduates.

Engine room watch keeping is considered the number one very relevant professional course according to the BSMarE Graduates followed by Basic Safety, and Ships, Ship Routines as well as Ship Construction, Marine Pollution and Prevention, and Marine Automation.

Furthermore, automation and alarm systems of machines are always helpful in detecting early stage faults; however, it is a known fact that human vigilance is more capable of detecting and interpreting errors more accurately. When on engine room round, all machines on all levels must be examined for proper operation. Moreover, seafarers must also make sure to note findings in the log book for future reference. They also considered Machine Shop, Marine Power Plant, Maritime Law and Electro Technology with much relevance to their job placement while Shipboard Personnel Management obtained the least weighted mean which is also considered with much relevance to their job placement.

The first and most important step to enhance performance of duties during a watch is to have a very strong knowledge-based. One must know the basics of the machines and their operations, new trends and upcoming technologies, and maritime regulations along with their amendments. Knowledge gives a great boost to engineer's confidence level and also results in more accurate job decisions. Engine room operation also requires information from other domains of engineering such as mechanical, hydraulic, pneumatic, electrical and electronic systems, refrigeration etc. Knowing these fundamentals makes an engineer's foundation stronger [6].

#### **Conclusion and Recommendation**

The proposed program aimed to enhance the Basic Safety Training and Engine/Deck Watch keeping courses of the students through strengthening the delivery of instruction and providing quality student services. Students must also be involved in extensive seminars and workshops on developing personality and confidence, enhancing communication skills through adopting Dyned Software or any English software as a tool/intervention as well as strengthening their spiritual and moral attributes. LIMA curriculum developers were also encouraged to

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integrate and implement Outcomes-Based Education in all facets of the Marine Transportation and Marine Engineering Programs.

The proposed program also aimed to improve the teaching strategies and development of personal and professional quality of the teachers through the aid of faculty development seminars conducted by the university and the department; and finishing graduate studies. Continuing satisfaction of the students through faculty consultation hour, availability of maritime professional related journals and magazines in the library and installation of updated simulation software in the laboratories were also highly recommended.

Enrichment of relationship between the administration and students is also being given emphasis in enhancing the LIMA student development programs. Enhancing the research and community extension awareness of the student are also the focused of the program through allowing the students to participate more often in the community extension projects of the department and allowing them to join the research forums and presentation of the university and participate in the seminars being conducted by the Research Center.

Development of the work values and skills of the students would also be enhanced through attending leadership trainings and national youth conferences. Students must be given time to search job opportunities using the internet and job data bases. Apprenticeship of the students must be monitored periodically to answer their needs of unemployment due to lack of work experience.

It is also necessary to enhance the performance of maritime students in MSAP and other examinations for their future employment opportunities. LIMA and GE faculty members could strengthen their program of conducting lecture and review sessions for the students before taking the Mock Exam and actual examination.

Sustaining and enhancing the employability rating of the graduates through conducting pre – employment examination and interview, attending job expo would also help the students find their way going to the top of the corporate ladder by strengthening their foundation during college.



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