RESEARCH CAPABILITY OF THE MARITIME FACULTY MEMBERS AND SENIOR STUDENTS IN LYCEUM INTERNATIONAL MARITIME ACADEMY

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Abstract

The paper served as the basis in planning for the enhancement of the research capability of the Maritime faculty members and senior students. This is supplementing the results of the training needs assessment being conducted by the Human Resource and Development Office of the University where research is one of the needs of faculty members and to develop research skills of the students especially those who are taking course in research. This study determined the level of competency in writing a research paper, level of satisfaction on the facilities/resources provided by the institution and to propose recommendations for the enhancement of research capability of the university. Descriptive type of research was utilized in the study. The results revealed that both respondents were moderately competent in terms of technical aspect, doing major parts of research paper as well as other part of it. On the other hand, they are satisfied on the facilities provided by the university.

Keywords: Planning, Research Capability, Training Needs, Maritime, LPU

Introduction

Educators have recognized that the writing process can benefit substantially from the use of examples to assist the learner in creating their own work, especially when a research study must meet particular format criteria. Learning by example is an emerging technique that focuses on the benefits for undergraduate and graduate students from viewing existing theses or dissertations as models for their own work.

Research is a serious and diligent quest for knowledge that must be promoted because its results have far-reaching benefits. It expands the field of knowledge further, discovering and generating new concepts, practices, and understanding. These in turn redound to applications that advance socio-economic enterprises and benefit communities. By taking an active role in the pursuit of knowledge through research, Lyceum of the Philippines University (LPU) validates its existence as a learning institution that serves not only its immediate constituency of students and faculty but the community and the entire country. LPU believes that training in the responsible conduct of research is an essential component of higher education and an important element in the implementation of LPU's research agenda to increase research opportunities at the University.

The overall aim of this paper is to serve as basis in planning for the enhancement of the research capability of the Lyceum International Maritime Academy faculty members and senior students. This is supplementing the results of the training needs assessment being conducted by the Human Resource and Development Office where research is one of the needs of faculty and to develop research skills of the students especially those who are taking research subject. This research specifically identifies the capability needs of the faculty and students researchers, which will serve as basis of planning for improvement.

This study generally determined the research competencies of the Maritime faculty members and students. Specifically, this study aimed to determine the respondents' level of competency in writing a research paper in terms of technical aspects, major and other parts of research paper; to determine the level of satisfaction on the facilities/resources provided by the

institution to enhance the research competencies and to provide recommendations for the enhancement of research capability of the respondents.

Research culture is concerned with the dynamics of the interrelationships among three areas. First, the Trifocal Function, which comprises the faculty's trifocal task of teaching, research, and community service or extension. These tasks interact in different ways for each faculty member. Second, the individual attributes and output, refers to the knowledge, skills, values and attitudes that the faculty members possess relative to the conduct of research. This also includes their readiness, capacity, and experience as regards research. Lastly, the institutional attributes and policies, refers to the policies set by the institution for the purpose of developing a research orientation. This includes all other policies and measures concerning faculty members of the entire institution (Minty, 2007).

Research culture involves the interaction between the first two areas namely trifocal function of faculty and individual attributes and output. Although a balance among the three tasks on the first area would be ideal, the nature and extent to which faculty members focus on each task depends on their discretion, which is influenced by their own perception of these tasks. Their output in the second area, on the other hand, is based on their knowledge about producing research. This also interacts with the way they view the trifocal function—first area—and the issues that they address in their research activities. Thus there is an interaction between the first and second areas.

In addition, research culture is also concerned with the interaction operating between the second and the third areas, which involves reciprocal processes. Area 3 influences the nature and extent of research productivity in Area 2. The reality in Area 2 must pave the way for the improvement or changes in Area 3. The research activities resulting from area 2 develop knowledge that would provide context for area 3.

A double enthusiasm is involved in understanding research culture. The interaction between area 1 and area 2 implies the frame of meaning derived by the faculty members from their trifocal function. The interaction between area 2 and area 3, on the other hand, implies a second

frame of meaning constructed by the faculty members as they view the institutional policies and assimilate their research function. These frames of meanings occur in the interaction between area 1 and area 3 as well. As represented by the double-headed arrows, the faculty members' research knowledge and skills as well as their performance of their trifocal task should also influence institutional policies, in the same way that institutional policies affect the other two domains.

This research knowledge and skills will be the bases and guiding principles of the faculty to teach and train students to make a research paper.

Materials and Method

The descriptive research was used in the study to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. The study focused on the capability of the respondents in conducting research. The survey method is used to describe the status quo of the research capabilities of the faculty from different colleges (Coats, 2005).

Participants of the Study

The research participants were the Maritime faculty members and 30 senior BS Marine Transportation students which were randomly selected using proportional allocation. The faculty members were both new and old researchers while the students are those taking research subjects.

Instrument

Questionnaire was the basic tool used in this study to gather the necessary information about the subject. The questionnaire consists of two parts: part one was used to determine the level of competency of the respondents on the components of research while the second part determined the status of the resources/facilities available.

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278

Procedures

The researchers read books, surf internet, dissertations and theses in order to come up with the questionnaire. Questionnaires were distributed to the respondents after validation. Interview was also done to deeply assess the needs of the respondents.

Data Analysis

The data gathered were encoded, tallied, interpreted and analyzed using PASW version 18. Descriptive statistics was the main tool used in the study.

Results and Discussion

Table 1 presents the competence of Maritime faculty members and students in terms of technical aspect of research.

Table 1

Competence of Faculty and Students in terms of the Technical Aspect

Items	Faculty			Students		
	WM	VI	Rank	WM	VI	Rank
1. research paper format	3.36	Moderately Competent	3	3.29	Moderately Competent	2
2. grammar and sentence construction	3.57	Competent	1	3.36	Moderately Competent	1
3. research organization	3.18	Moderately Competent	4	3.15	Moderately Competent	4
4. communication skills (in writing and the conduct of research data gathering, interviews, etc.)	3.53	Competent	2	3.25	Moderately Competent	3
Composite Mean	3.41	Moderately Competent		3.26	Moderately Competent	

Legend: 4.50 – 5.00 = Highly Competent; 3.50 – 4.49 = Competent; 2.50 – 3.49 = Moderately Competent; 1.50 – 2.49 = Less Competent; 1.00 – 1.49 = Not Competent

It was viewed that the over-all assessment was moderately competent both for faculty and students with a composite mean of 3.41 and 3.26. Among the items enumerated, the researchers' competence in grammar, sentence construction and communication skills got the weighted means of 3.57 and 3.53 respectively. There are many challenges that could arise when writing a paper. These two aspects were really observed when writing a research paper because the researchers whose specializations are not in the field of language. They need to be trained to develop both writing and speaking skills to be more confident to gather data and write the research project.

In terms of research paper format and organization, it was rated moderately competent since some faculty find it hard to shift to the new format of a research paper. The faculty members need to study the use of APA style in publishable format since they are not very competent in both written and oral communication skills, they have problems in research organization.

On the other hand, students still needs proper orientation on how to make a research and how to construct ideas in creating a research paper since all of them assessed themselves on this area as moderately competent.

Table 2 presents the competence of faculty and students in producing the major parts of research paper.

Table 2

Competence of Faculty and Students In Producing the Major Parts of Research Paper

Major Parts of Research Paper	Faculty			Students		
	WM	VI	Rank	WM	VI	Rank
Introduction						
1. writing an introduction	3.39	MC	3	3.38	MC	2
2. creating research problem	3.31	MC	5	3.17	MC	4

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280

3. formulating theoretical / conceptual paradigm	3.28	MC	6	3.10	MC	6
4. formulating hypothesis	3.41	MC	2	3.20	MC	3
5. sources of literature review	3.49	MC	1	3.42	MC	1
6. conceptualizing research literature	3.33	MC	4	3.15	MC	5
Composite Mean	**3.37**	**MC**		**3.24**	**MC**	
Methods						
1. develop research design	3.32	MC	5	3.12	MC	7
2. data collection	3.43	MC	1	3.38	MC	1
3. data entry (coding and cleaning)	3.37	MC	2	3.29	MC	3
4. sampling/ sample framework	3.35	MC	4	3.17	MC	4
5. constructing questionnaires	3.25	MC	6	3.13	MC	6
6. wording and ordering of questions	3.36	MC	3	3.30	MC	2
7. statistical tools / treatment	3.14	MC	7	3.15	MC	5
Composite Mean	**3.32**	**MC**		**3.22**	**MC**	
Results and Discussion						
1. presentation of data gathered	3.37	MC	1	3.39	MC	1
2. interpretation / analysis of results	3.28	MC	3	3.15	MC	3
3. correlate literature to affirm results	3.36	MC	2	3.21	MC	2
Composite Mean	**3.34**	**MC**		**3.25**	**MC**	

Table 2 (cont.)

Competence of Faculty and Students In Producing the Major Parts of Research Paper

Conclusion / Recommendation						
1. synthesizing results	3.42	MC	1	3.23	MC	2
2. expressing additional value or importance to the existing facts	3.37	MC	3	3.21	MC	3
3. formulating recommendations to address the research problem and concerns	3.38	MC	2	3.25	MC	1

found in the study

Composite Mean	3.39	MC	3.23	MC
Over-all Composite Mean	3.35	MC	3.23	MC

Legend: 4.50 – 5.00 = Highly Competent; 3.50 – 4.49 = Competent; 2.50 – 3.49 = Moderately Competent; 1.50 – 2.49 = Less Competent; 1.00 – 1.49 = Not Competent

As viewed from the table, the competency level of the respondents in doing the major parts of research paper was moderate. In terms of the introduction, sources of literature review got the highest value of 3.49 and rated moderately competent.

In a research paper, literature is very important to support the findings of the study. The faculty members are moderately competent in summarizing the literature and finding their relevance to their present work. However, they are least competent on the method used. However, it was found out that they were least competent in formulating a research problem and the conceptual / theoretical paradigm, that is why, they ask their dean and the research committee to assist them. Furthermore, the Research Council, including the VP for Research, VP for Planning and the Research Director, suggest the necessary corrections while in the process of evaluating the research proposal.

As to the method, faculty members regard themselves as moderately competent in data collection. Their weakness falls on the construction of questionnaires, developing research designs and in statistical tools and treatment. With respect to the results and discussion part, faculty members are moderately competent in presentation of data gathered. Correlating related literature to the results and analysis of results got the lowest mean value of 3.36 and 3.28. The faculty members therefore need more guidance in this aspect. The role of the referee / reader is then indispensable.

In regard to the conclusion and recommendation part, faculty researchers are moderately competent in synthesizing results (3.42), formulating recommendations to address research problems and concerns (3.38) and expressing additional value of importance of the existing facts which become the basis of recommendations. This is one of the concerns of the readers who patiently guide the faculty researchers to polish their work.

Among the parts of research paper, the respondents have the least competency on the methods, having the composite lowest weighted mean of 3.32 (moderately competent). With regards to the students research capability, it was found out that all parts of the research were assessed as moderately competent. This implies that students need to be more familiar on the research format and they need to develop research skills for them to appreciate and embody the research culture.

Table 3 shows the competence of the faculty members and senior students in producing the other parts of research paper.

Table 3

Competence of the Faculty and Students in Producing the Other

Parts of Research Paper

Other Parts of Research Paper	Faculty			Students		
	WM	VI	Rank	WM	VI	Rank
1. clearly stating the research focus	3.32	Moderately Competent	5	3.36	Moderately Competent	3
2. summarizing the research methods used	3.39	Moderately Competent	3.5	3.30	Moderately Competent	4
3. outlining the results and discussion of the study	3.47	Moderately Competent	1	3.29	Moderately Competent	5
4. summarizing conclusion and recommendations of the study	3.43	Moderately Competent	2	3.43	Moderately Competent	1

5. using the abstract format	3.39	Moderately Competent	3.5	3.38	Moderately Competent	2
Composite Mean	**3.40**	**Moderately Competent**		**3.35**	**Moderately Competent**	
References						
1. presentation / format of references	3.42	Moderately Competent	2	3.46	Moderately Competent	2
2. accessing of available and updated materials	3.51	Competent	1	3.49	Moderately Competent	1
Composite Mean	**3.47**	**Moderately Competent**		**3.48**	**Moderately Competent**	
Over-all Composite Mean	**3.43**	**Moderately Competent**		**3.41**	**Moderately Competent**	

Legend: 4.50 – 5.00 = Highly Competent; 3.50 – 4.49 = Competent; 2.50 – 3.49 = Moderately Competent; 1.50 – 2.49 = Less Competent; 1.00 – 1.49 = Not Competent

As gleaned from the table, the faculty members are moderately competent in doing the other parts of the research paper. In terms of abstract, outlining the results and discussion of the study ranked first with 3.47. It was followed by summarizing conclusion and recommendations of the study and preparing abstract format. Since the weighted means are verbally interpreted as moderately competent, they still need to hone their skills in these areas. Clearly stating the research focus was least ranked among the elements of the abstract.

With regards to students, summarizing conclusion and recommendations of the study got the highest mean of 3.43, followed by using the abstract format and clearly stating the research focus. This means that student gained insights through the lens of their own experiences, for improving the transfer, teaching, learning, and measurement of information literacy competencies. Students greatest challenges are related to their perceived inability to find desired materials. Students seek "contexts" as part of the research process, finding contexts for

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284

backgrounding topics and for figuring out how to simplify complex information may be the most difficult part of the research process.

As to references, faculty members and students have the same assessment because accessing of available and updated materials was seriously done by the respondents who regard themselves as competent; however, they are moderately competent in the presentation / format of references, because they need to study and familiarize themselves with the use of the prescribed APA style.

Table 4 shows the level of satisfaction on the facilities / resources assessed by the Faculty members.

Table 4

Level of Satisfaction on the Facilities / Resources Assessed by the Faculty

Facilities / Resources	WM	VI	Rank
1. computer units for research purposes	2.85	Satisfied	9
2. journals, books and other materials	2.78	Satisfied	11
3. installed e-journals (i.e Academic One-File, etc.)	2.76	Satisfied	13
4. training area for in-house / small seminars	2.88	Satisfied	6
5. IIP trainings in research	2.77	Satisfied	12
6. internet access	2.86	Satisfied	7.5
7. laboratories for experimental research	2.82	Satisfied	10
8. services of the statistician	3.00	Satisfied	4
9. services of editor / grammarian	3.02	Satisfied	2.5

10. services of referee / reader	3.02	Satisfied	2.5
11. consultation services of adviser (Dean, Research Committee, Research staff / COREB)	3.06	Satisfied	1
12. publications of college / institutional research journals	2.94	Satisfied	5
13. budget for research publications	2.86	Satisfied	7.5
14. budget for writing a research	2.65	Satisfied	15
15. budget for seminars and fora	2.70	Satisfied	14
Composite Mean	**2.86**	**Satisfied**	

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

It can be gleaned from the table that the respondents are satisfied from the resources/facilities offered by the school as this item obtained the composite mean of 2.86. Among the items mentioned, consultation services of adviser (Dean, Research Committee, Research staff / COREB), services of editor / grammarian and services of referee / reader top the ranked items with weighted mean values of 3.06 and 3.02 respectively. This only implies that the respondents agreed to the process that each college is given assistance in particularly in the preliminary process form consultation up to the formulation of the research proposal. It is important to have readers / referees and editors so that papers will be thoroughly checked and polished. .

Though all were interpreted satisfied, there were items that need careful attention such as laboratories for experimental research (2.82), journals, books and other materials (2.78) and budget for seminars and fora (2.70). These items were ranked the least since there were no enough laboratory rooms for the faculty to conduct experimental researches and also there are limited resources and journals in their particular field of discipline. With regards to the budget

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286

allocation, the college nor the Research Center does not have the full authority to give the needed budget for the paper since it is based from the approval of the university President.

Conclusions

In the technical aspect, the faculty are competent in grammar, sentence construction and communication skills while students are moderately competent in the stated areas.   Among the major parts of the research paper, both the faculty and students need more improvement on the methods particularly in the construction of questionnaires, developing research designs and in determining statistical tools and treatment. Respondents are satisfied with the facilities and resources provided by the school, however, they are mostly concerned with the budget for research training seminars/fora, journals, books and research materials as well as laboratories for experimental research.

Recommendations

Since the competency level of faculty and students in the technical aspect of the research paper is not high, the faculty must be provided with the necessary training in communication both in oral and written, as needed in writing a research paper. This may include techniques and use of language in academic writing and research, and more reinforcement activities in the use of APA style using the prescribed research format. More training workshops in writing all the parts of the research paper particularly on the practice of appropriate research method, statistical tool and treatment and the formulation of instrument should be provided. The University should enhance industry collaboration to seek additional support from other agencies that provide for research development.

The department may consider having a curriculum on research alone so that the students will be transformed into research-intensive learning and may create different ways of building and strengthening the teaching/learning research process. The management should provide more budget to support the research activities such as trainings and capability workshops, e-journals and research materials/ references, and laboratory facilities for experimental work. The Research Center staff and the Deans, thru the supervision of the VP for Research, should continue to find means and ways to improve the research capability in the university.

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