Status of Implementation and Usefulness of Outcomes – Based Education in Customs Administration Program of one Asian University

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Abstract - The study aimed to determine the status of implementation in terms of practices and environment as well as its usefulness in terms of academics, attitudes and instructions of OBE for Customs Administration Students of Lyceum of the Philippines University – Batangas (LPU-B). This study made use of the descriptive method of research. Based on the results, Outcomes-Based Education is implemented in both aspects of practices and environment as perceived by customs administration students. Respondents assessed that Outcomes-based Education as very useful in terms of academics, attitudes and instructions and the level of usefulness of outcomes-based education is related to its level of implementation to customs administration students.

Keywords: *OBE; Implementation; Usefulness; Customs Administration; Education*

INTRODUCTION

There is a growing worldwide concern among the stakeholders of education that the present educational system does not prepare students adequately for life and work in the 21st century. The quest of academic institutions of higher learning to provide substantial educational services is deeply rooted in their responsibility to hone the character of the nation [1].

In order to remain responsive to these challenges, Higher EducationInstitutions (HEIs) need to continuously assess correctly the organization's strategic needs and ever-evolving business process requirements in terms of core, operational and management competencies. This Asia Pacific Journal of Education, Arts and Sciences Vol. 3 No.3, 62-69 July 2016 P-ISSN 2362-8022 E-ISSN 2362-8030 www.apjeas.apjmr.com

has prompted many educators across the globe to explore new ways of designing education including a review of the curriculum, the instructional processes and the methods of assessment in order to cope up with international standards [2]. Introducing OBE as part of the system in the learning process serves as quality measure in ensuring the outcomes of educational services are deeply rooted in the program educational objectives [3], [4]. This brings about the shift from the traditional content based education toward outcomes based education [5] - [8]. Implementation of Outcomes-Based Education (OBE) is the main thrust of most Higher Education Institutions in the Philippines today to go along with the standards of foreign universities and colleges all over the world [6].

HEIs are expected to educate students in their chosen discipline and to prepare them for employment or practice of profession. Revisions made to the curriculum to align with OBE will help the graduates meet the required skills in fast changing and global standards workforce needs [9]. While employers sometimes complain that HEIs fail to produce graduates with the skills that they require, HEIs often respond that students are not being prepared to meet the needs of any particular job or employer but rather they are equipped for a variety of employment opportunities, including self-employment. Dialogue between **HEIs** and employers is a possible solution for this disparity. Active involvement of industry-partners in the curriculum development provides substantial input to the content and practice of the academic institutions to hone the students based on the demands of labor market[10], [11].

For HEI today, conforming to international standards is no longer an option or an aspiration; it has become an obligation. It is stated in the study conducted

by Castillo [12], that a measure of international standing of an HEI is the ability of its graduates to secure employment or to practice profession across borders. HEIs have to produce graduates with relevant competencies that respond to the global challenges and development needs[13]-[19].

Thus, the researchers have conducted this study. Awareness about this wide implementation of OBE greatly affects the researchers being student of this University. Therefore, this study will help the customs administration students of LPU-B to adequatelyprepare them to be competent and knowledgeable for best career opportunities. Since LPU-B is implementing OBE, it is very essential to go in depth into the level of usefulness of OBE. Lastly, the researchers believe that conducting this research will greatly enhance the richness of learning and discovering.

OBJECTIVES OF THE STUDY

The study aims to determine the status of implementation and usefulness of Outcomes-based Education (OBE) among Customs Students of LPU - Batangas.

Specifically, the researchers seek to assess the status of implementation of OBE in LPU as perceived by customs administration students in terms of practices and environment; determine the level of usefulness of OBE in terms of academics, attitudes and instructions; test the significant relationship between the extent of implementation and the level of usefulness of OBE in Customs Administration and; propose an action plan to identified address the concerns in the implementation of OBE.

METHODS

Research Design

This study used descriptive method of research wherein the quantitative data were gathered using a survey questionnaire to determine the level of usefulness of OBE and the extent of its implementation at LPU - B as well as the significant relationship between the two.Descriptive type of research used systematic observation to describe specific behavior. а Descriptive researchers created very detailed records and observed many subjects but it cannot make predictions or determine causality. It simply identifies behaviors and describes the behavior and the participants [20].

Participants

The researchers were able to obtain 62 customs administration students as respondents from total population of 292, applying simple stratified sampling. The 62 respondents are consist of 15 first year students, 15 second year students and the remaining 32 came from third year students. The respondents were chosen through random sampling.

Instrument

The researchers used questionnaire which is modified based from the previous researches related to the study entitled "Status of Implementation and Usefulness of Outcomes-Based Education in the Engineering Department of an Asian University" by Borsoto et al [21]. The first part of the instrument consists of statements about the status of implementation of OBE as perceived by the Customs Administration students in terms of practice and environment. The second part consists of statements about the level of usefulness of OBE in terms of academics, attitudes and instructions. The questionnaire was checked and validated by the adviser and statistician through content validation and was undergone through test – retest analysis and obtained high reliability score.

Procedures

The researchers selected the topic for the research proposal and presented it to the adviser for consultation. To have sufficient data, the researchers used the basic method which is the utilization of library. Most of the time given was used for gathering relevant information from various resources such as books, published and unpublished theses. Also, with the help of the internet they gathered the information about the nature and implementation of OBE.

Then, the researchers formulated set of questions that was presented to the thesis adviser for approval of the questionnaire which was used as the main instrument to gather sufficient data and information. Before administration, the questionnaires were distributed to some customs students for validation. The researchers personally distributed the questionnaires to 62 customs students through random sampling of LPU – B with the content of the questionnaires explained to them clearly and stated that answers will be treated with confidentiality and will be used for this study only. One hundred percent retrieval rating of the accomplished questionnaires was done immediately after the distribution.

Data Analysis

After collecting the questionnaire, the answers were tallied, tabulated, analyzed and recorded using the statistical tool most appropriate for the study. Weighted Mean was applied to consolidate the answers of respondents to each question. Ranking was used to derive the highest and lowest points of weighted mean from the set perceptions and determinants of OBE. Composite Mean was used to get the average mean to come up with general results of students' response for each part of the questionnaire. It was used to determine the usefulness of OBE and the status of its implementation. Inferential statistics was used in this study such as Pearson Product Moment Correlation Coefficient. It was used to test the significant relationship between the usefulness of OBE and its extent of implementation. The given scale was used to interpret the result of the study: 3.50 - 4.00 - Very Useful (VU); 3.49 - 2.50 -Useful (U); 2.49 - 1.50 - Less Useful (LU); 1.00 -1.49 – Not Useful (NU)

RESULTS AND DISCUSSION

Status of Implementation of OBE in terms of Practices

The composite mean score of 3.33 signifies that OBE practices in customs administration are being implemented. It is implemented in providing well defined assessment criteria that are clear to both teachers and learners on how assessment will take place (3.35) and in requiring the students to keep their exams and activities in portfolio for analysis (3.35) These practices obtained the highest weighted mean scores. Providing a chance for the students to undergo remedial or other corrective actions for learning (3.34) and ensuring that learners know exactly what is expected from them as unit standards make it very clear what is required from them (3.32) are also being implemented. Ensuring a more objective assessment and fair result of the predetermined criteria obtained the least weighted mean score (3.29) which is also being implemented.

It can be inferred that all five indicators of OBE implementation in terms of practices are all implemented in Customs Administration.

Professors of Customs Administration, as part of OBE requires the students to keep all the exams, activities, and assignments in a portfolio for analysis by using a student's monitoring sheet. The customs administration students are not aware that OBE ensures a more objective assessment and fair result of predetermined criteria due to minimal orientations and seminars. OBE implementation in terms of practices are more evident in providing well – defined assessment criteria that are clear to both teachers and learners on how assessment will take place and in requiring the students to keep their exams and activities in portfolio for analysis. It clearly shows that customs students of LPU-B are practicing the requirements associated with OBE as new learning system of the institution. Well defined assessment criteria, making it clear to both assessors and learners how assessment will take place are an utmost advantage of Outcomes-based Education [6].

Status of Implementation of OBE in terms of Environment

The computed composite mean score of 3.30 implies that there is implementation of OBE in area of environment. Ensuring better way of delivering instruction through appropriate teaching methodology and classroom management and providing learning environment that caters the development of students as future professionals are implemented as denoted by the computed weighted mean score of 3.37 and 3.35 on rank 1 and 2, respectively.

Furthermore, promoting values formation and character traits ideal to different employment settings and fostering a better integration between education at school and industry as well as greater support for OBE from all role – players due to the extensive level of consultation and stakeholder involvement are all implemented with respective weighted mean scores of 3.27, 3.26, and 3.24 on ranks 3, 4 and 5, respectively.

Proper teaching methodology and classroom management are very important factors in the successful learning of a student. In this study, this indicator got rank number one which signifies that OBE contributes to the better way of delivering instructions to customs administration students. More so, all students aim to be With OBE, professionals. all future customs administration students are provided with learning environment that will cater their development to achieve their aims and goals. School environment greatly contributes to the accomplishment of academic tasks and co-curricular activities that shapes the character and values of the students [22] - [24].

Customs Administration's implementation of OBE ensures better way of delivering instruction through appropriate teaching methodology and classroom management. On the other hand, students of customs administration are not fully aware about the greater support for OBE from all role – players due to the extensive level of consultation and stakeholder involvement. The respondents also believe that OBE is capable of providing a learning environment that will help them develop their skills and promotes character formation as future professionals.

New and emerging technologies challenge the traditional process of teaching and learning and the way things are managed and controlled [25]. This means that students demand high profile programs that will enhance their prospects [8].

The result of the study supported the research of Borsoto et. al [21] claiming that it is very important that the management will always make sure that facilities and services are always available, adequate and in good running condition to better facilitate learning between the teachers and students based on the composite mean score of 3.33 of determinants of implementation of OBE in terms of environment which signifies implemented.

OBE's implementation in terms of practices and environment obtained computed mean scores of 3.33 and 3.30 on rank 1 and 2 respectively. This signifies that OBE is being implemented in both aspects. However, it is more evident in practices having obtained the higher mean score. Professors who handled Customs Administration students are well equipped with knowledge on how to greater implement OBE in teaching methodologies and strategies. Implementation of OBE in terms of environment requires greater support from all role – players due to the extensive level of consultation and stakeholder involvement.

Level of Usefulness of OBE in terms of Academics

The composite mean score of 3.54 signifies that the OBE is considered very useful in the area of academics.Customs administration students believe that OBE greatly helps them in measuring their performance in knowledge, skills and work related values through instruction and it promotes responsiveness of the school activities towards the enhancement of student's academic performances. This is through assessment examinations and portfolios which are required to students. In addition, strengthening capabilities and skills of the students and developing their study habits obtained rank 3 and 4 respectively which means that the perception of purpose of OBE in student's mind are still unclear. Academic performance serves as the measure of ability of the students to perform several academic related tasks in terms of research projects, home works and as results of major and minor examinations [26]-[29].

Further, the study of Caguimbal et al. [30] states that one of the many advantages of OBE is promoting the acquisition of specific skills and competencies in a country in which there are many skills shortages. This advantage supports the result of this study.

On the other hand, first year customs administration students are still in the period of adjustment, faculty members must be considerate enough to strengthen their capabilities and skills and develop their study habits.

Level of Usefulness of OBE in terms of Attitudes

The composite mean score of 3.49 signifies that OBE is useful in developing attitude of customs administration students towards learning.OBE is very useful in challenging the students to become more competitive (3.61). It is also very useful in creating a mind-set towards a clear direction of learning (3.52). In motivating the students to be independent and helping learners to accept responsibility of learning for they are now center of learning process, OBE is also considered useful by the respondents, having computed weighted mean scores of 3.48 and 3. 44, in ranks 3 and 4 respectively. OBE is also useful in practicing collaboration rather than competition (3.40).

OBE challenges the students to be more competitive. Educators are always in quest of better, more effective and more relevant ways to educate learners. OBE aspires to transform customs administration students into welleducated graduates who are experts in their chosen professions and possess Filipino family values with qualities desired by industries that are capable of contributing to the welfare of the country and the world. OBE teaches in a way that encourages students to acquire knowledge, skills and values through their own activities. Attitude describes the characteristics of the students on how they feel towards the certain condition and consequence that would lead them to a particular decision based on their mind-set [31]-[34]. The outcomes of their attitude are being demonstrated on their behavior.

Level of Usefulness of OBE in terms of Instructions

The composite mean score of 3.47 implies that OBE is useful in delivering appropriate instruction. As seen from the table, the study reflects that in requiring faculty members to master the subjects being handled, OBE is

very useful. It is also considered very useful in asking the teachers more of a facilitator than a lecturer and improvising learning skills necessary for the industry.

Creating conductive atmosphere for teaching and learning process and simplifying execution of the lessons, on the other hand obtained weighted mean scores of 3.45 and 3.31 respectively which signifies that OBE is useful in those particular are of instructions. Faculty members play a very important role on how to extend the usefulness of OBE in Customs Administration students of LPU. That is why it is very important for a faculty to master the subject being handled. In OBE, the teacher does not only teaches about the topic covered but rather with the desired knowledge, skills and attitudes or student outcomes the students need to exhibit at the end of the course and the practical application of these in their professions.

Teachers should be able to facilitate the teaching and learning process with expertise and mastery of the subject relating to other discipline and applying to real world situation [35]-[40]. Utilizing appropriate instructional materials based on the need of the topic being discussed and classroom activity is an essential attribute for the teachers to develop in order to deliver quality of instruction and effective way of transferring and sharing knowledge. On that way, students might be able to increase their aspiration to attain higher goals [41].

Table 1.Summary of Level of Usefulness of OBE

Indicators	WM	VI	Rank
Academics	3.54	VU	1
Attitudes	3.49	U	2
Instructions	3.47	U	3
Composite Mean	3.50	VU	

Table 1 presents the summary of level of usefulness of OBE in terms of Academics, Attitudes and Instructions. BSCA students believe that OBE is very useful in academics, having obtained the highest weighted mean score of 3.54. Further, it is also found to be useful in attitudes and instructions, having obtained rank 2 and 3 respectively. To summarize, the overall composite mean score of 3.50 with verbal interpretation of very useful implies that OBE is very much helpful to students whether in academics, attitudes or instructions.

In the study of Borsoto et al. [21] academics, attitudes and instructions got over all composite mean score of 3.31 with verbal interpretation of useful. In this study, for Customs Administration students, the level of usefulness of OBE is interpreted as very useful. This is supported by Spady's three premises of OBE which are: Successful learning promotes even more successful learning, all students can learn and succeed and teaching institutions control the conditions that directly affect successful learning. Success breeding success lies on the academics of the program with aid of OBE by helping the students measure their own performance in knowledge, skills and works related values. OBE challenges the students to be more competitive as an attitude which aims that all students can learn and succeed although not on the same day and not in the same way. Instructions, particularly in requiring faculty members to master their subjects being handled implies that institutions have control on the conditions that affect the student's successful learning. Therefore, OBE's three premises are directly related to its usefulness in academics, attitudes and instructions [42].

Table 2. Relationship between Status of Implementation and Level of Usefulness of OBE

	r value	p-value	decision
Status vs Level of			
Implementation of			
OBE	0.331	0.009*	Rejected
Significant at p-value < 0.0	5		

Table 2 presents the relationship between the status of implementation and level of usefulness of OBE in the college. Results showed that the computed r-value of 0.331 indicates moderately low positive correlation and the resulted p-value of 0.009 is less than 0.05 level of significance; thus, the null hypothesis of no significant relationship between the status of implementation and level of usefulness of OBE is failed to accept. Therefore, there is a significant relationship between status of implementation and level of usefulness of OBE in the college. This implies that, if the implementation is strict and high, usefulness will also be high. Thus, usefulness of OBE is directly related to its implementation. If OBE is well implemented on all indicators of practices and environment, its advantages will enhance the usefulness of OBE in academics, attitudes and instructions.

With OBE, administration and faculty members can work closely with students [30]. This implies the wide

and strong implementation of OBE in terms of practices by faculty members and environment by administrations can be achieved by working handin-hand to bring to the students the ultimate usefulness of OBE in academics, attitudes and instructions.

Action Plan addressed the identified concerns in the implementation of OBE in customs administration. The items which obtained the least weighted mean are chosen to be the focus of improvement and considered the objectives of the propose action plan.

The table shows the suggested activity for each objective, the responsible for its execution, the time table, the resources needed and the performance indicator. This action plan aims to improve and enhance the identified concerns regarding the implementation of OBE in specific areas.

Propose Plan of Action

The proposed action plan to enhance implementation and usefulness of Outcomes-Based Education suggests to conduct more intensive orientations, seminars and practice about OBE to be by the whole administration (top attended and middle management, faculty members and students); careful designing of the rubrics of the program which is to be carefully explained to the more effective teaching materials students; use and relate lessons to real life situations; design group activities for students and peer review which will allow students to experience first-hand process, conducting field trips and collaborative trainings; and give the students moreassignments for them tocontinue learning not justin classroom but also at home.

CONCLUSIONS AND RECOMMENDATIONS

Outcomes-based Education is implemented in both aspects of practices and environment as perceived by customs administration students. Respondents assessed that Outcomes-based Education is very useful in terms of academics, attitudes and instructions. The level of usefulness of outcomes-based education is related to its level of implementation to customs administration students. A plan of action was proposed to enhance implementation and usefulness of OBE to customs administration students.

It is recommended that the college may have a continuous and sustainable monitoring of the

implementation of OBE through the use of data base system. The college can improve the monitoring system of the implementation of OBE through seminars and examination.The additional assessment customs curriculum must always be updated with the current trends and needs of the industry to prepare the graduates and demonstrate the core competencies expected of them in the workplace. The Faculty and students may attend will gain knowledge for that seminars the implementation of OBE to easily develop a solution or action for its effective implementation.Faculty members and Philippine Society of Customs Administration Students (PSCAS) may provide activities intended to practice collaboration rather than competition among learners by conducting peer reviews, field trips and trainings which will allow them to experience collaborative process. The action plan may be evaluated, implemented and monitored to test its usefulness and effectiveness.Future researchers may conduct related or follow-up study about the implementation and level of usefulness of OBE in Customs Administration of LPU-B using different set of variables.

REFERENCES

- [1] Laguador, J.M. (2013). Developing Students' Attitude Leading Towards a Life-Changing Career, Educational Research International, 1(3): 28-33
- [2] Laurel, (2012). Outcomes-based Education and Accreditation, keynote speech delivered at PACU Seminar at University of Mindanao
- [3] Dotong, C. I. & Laguador, J. M. (2015). Philippine Quality Assurance Mechanisms in Higher Education towards Internationalization, Studies in Social Sciences and Humanities, 3 (3),156-167
- [4] Laguador, J. M., Villas, C. D., & Delgado, R. M. (2014). The Journey of Lyceum of The Philippines University-Batangas Towards Quality Assurance And Internationalization Of Education, Asian Journal of Educational Research, 2(2)
- [5] Reyes, P. B. (2013). Implementation of a Proposed Model of a Constructivist Teaching-Learning Process: A Step Towards an Outcome-Based Education in Chemistry Laboratory Instruction, Asia Pacific Journal of Multidisciplinary Research, 1(1), 174-187
- [6] Laguador J.M. & Dotong C., (2014). Knowledge versus Practice on the Outcomes-Based Education Implementation of the Engineering Faculty Members in LPU, International Journal of Academic Research in Progressive Education and Development, 3(1)
- [7] An, I. L. (2014). Impact of Outcome-Based Education Instruction to Accountancy Students in an Asian University, Asia Pacific Journal of Education, Arts and Sciences, 1(5), 48-52

- [8] Laguador, J. M. (2014). Cooperative Learning Approach in an Outcomes-Based Environment, *International Journal of Social Sciences, Arts and Humanities*, 2(2), 46-55
- [9] Bay Jr, B. E. (2013).Integration of Technology-Driven Teaching Strategies for Enhancing Photojournalism Course. *Educational Research International*,2(2), 155-164.
- [10] Laguador, J. M. & Ramos, L. R. (2014). Industry-Partners' Preferences for Graduates: Input On Curriculum Development, *Journal of Education and Literature*, 1(1), 1-8
- [11] Chavez, N. H. (2014). Developing Students' Competencies and Academic Performance through Academe- Industry Partnership, Asia Pacific Journal of Education, Arts and Sciences, 1(5), 1-10
- [12] Castillo, R. C. (2014). A paradigm shift to outcomes based higher education: Policies, principles and preparations. *International Journal* of Sciences: Basic and Applied Research, 14(1), 174-186.
- [13] Laguador, J.M. & Dotong, C.I., (2013). Tracer Study of BS Computer Engineering Graduates of Lyceum of the Philippines University, International Journal of Management, IT and Engineering, 3(8): 387-401
- [14] Dotong. C. I. (2014). School Related Factors in the Development of Graduates' Competencies towards Employability, *Journal of Education and Literature*, 1(1), 28-36
- [15] Chavez, N. H., Dotong, C. I., Camello, N. C., & Laguador, J. M. (2016). Employability of Engineering Graduates of one Asian University as Basis for Curriculum Review, *EPH-International Journal of Science and Engineering*, 1 (6)
- [16] Chavez, N. H., De Castro, E. L., Camello, N. C., Dolot, J. A., & Laguador, J. M. (2016). Relevance of School Related Factors to the Job Placement of Engineering Graduates. *EPH-International Journal Of Science And Engineering*, 1(6).
- [17] Dotong, C. I., Chavez, N. H., Camello, N. C., De Castro, E. L., Prenda, M. T. B., & Laguador, J. M. (2016). Tracer Study of Engineering Graduates Of One Higher Education Institution In The Philippines For Academic Year 2009-2012. European Journal of Engineering and Technology Vol, 4(4).
- [18] Aguila, G. M., De Castro, E. L., Dotong, C. I., Laguador, J. M. (2016). Employability of Computer Engineering Graduates from 2013 to 2015 in one Private Higher Education Institution in the Philippines, Asia Pacific Journal of Education, Arts and Sciences, 3(3).
- [19] De Castro, E. L., Prenda, M. T. B., Dolot, J. A., Laguador, J. M. (2016). Employers' Feedback on the Job Performance of Computer Engineering

Graduates in an Asian Academic Institution, *Asia Pacific Journal of Education, Arts and Sciences*, 3(3).

- [20] Matus, R. (2009). How to Read Research Presented in Popular Media, URL: http://slhall.students.noctrl.edu/difference.html
- [21] Borsoto, L. D., Lescano, J. D., Maquimot, N. I., Santorce, M. J. N., Simbulan, A. F., & Pagcaliwagan, A. M. (2014). Status of Implementation and Usefulness of Outcomes-Based Education In The Engineering Department Of An Asian University. Asian Journal of Management Science and Economics Vol, 1(1).
- [22] Agena, E. M., Tiongson, B. L., Arevalo, B., Clemeno, M. C., Dolor, G., Laguador, J. M. (2015). Marine Transportation and Marine Engineering Students' Attitude on Classroom Social Environment, Asian Journal of Basic and Applied Sciences, 2 (1), 7-15.
- [23] Bay Jr. B. E. &Subido, H. (2014). DREEM is Real: Dental Students Learning Environment in an Asian University, *International Journal of Academic Research in Business and Social Sciences*, 4(7). 620-635
- [24] Mendoza, M. P., Masangcay, R. M., Batalla, E. T., Bacay, T. E. (2014). Environmental Elements of Learning Style Preference of High and Low Performing Marine Engineering Students, *Studies in Social Sciences and Humanities*, 1(4), 150-156
- [25] Macatangay, L. (2013). Tracer Study of BSCS Graduates of Lyceum of the Philippines University From 2004-2009, Academic Research International, 4(5): 361-377
- [26] Laguador, J.M. (2013). Academic Performance of Freshman Engineering Students Based on their Perception and Actual Final Grades, *Journal of International Academic Research for Multidisciplinary*, 1(7): 1-8
- [27] Laguador, J.M. (2013c). Engineering Students' Academic and on-the-Job Training Performance Appraisal Analysis, *International Journal of e-Education, e-Business, e-Management and e-Learning*, 3(4): 301-305
- [28] Laguador, J.M. (2013d). Observed Classroom Behaviour as Predictor of the Major Examination Results in Advanced Statistics of BS Industrial Engineering Students, *International Journal of Management, IT and Engineering*, 3(7): 349-360
- [29] Laguador, J. M. & Pesigan, M. (2013). Academic Performance and Measure of Character and Personality of Engineering Students With And Without Referral from Counselling Center, Asian Academic Research Journal of Social Science and Humanities, 1(6): 281-293
- [30] Caguimbal, D. A., Delacion, D. C., Medina, A. O., Mendoza, M. S., Mendoza, R. J. M., & Sanchez, M. M. (2013). Level of Awareness of the Maritime Students on the Outcomes-Based Education. *Educational Research International*, 2(1), 7-12.

- [31] Bacay, T. E., Dotong, C. I., Laguador, J. M. (2015). Attitude of Marine Engineering Students on Some School-Related Factors and their Academic Performance in Electro Technology 1 and 2, *Studies in Social Sciences and Humanities*, 2(4), 239-249
- [32] Flores, J., Masangcay, R. M., Mendoza, M. P., Garcia, O. B., Aguado, C. L. (2015). Attitude on School Facilities and Services of High and Low Performing Marine Engineering Students, *Asian Journal of Social Sciences, Arts and Humanities*, 3(1), 1-8.
- [33] Laguador, J.M. (2013f). Freshman Computer Engineering Students' Attitude Capability in Solving Solid Mensuration Major Exam Problems, International Journal of Social Science & Interdisciplinary Research, 2(9): 1-11
- [34] Laguador, J.M. & Pureza, R.J. (2013). Relationship between Attitude and Performance in "Introduction to Information Technology" Course of Engineering Students, *International Journal of Social Science & Interdisciplinary Research*, 2(6): 1-9
- [35] Laguador, J. M., Deligero, J. C. L., Cueto, A. (2015), Students' Evaluation on the Teaching Performance of Tourism and Hospitality Management Faculty Members, *Asian Journal of Educational Research*, 3(3), 28-33
- [36] Aguado, C. L., Garcia, O. B., Laguador, J. M., & Deligero, J. C. L. (2015). Teaching Performance and Extent of Work Values among Faculty Members in one Asian Maritime Academy,

International Journal of Management Sciences, 5(12), 805-816

- [37] Laguador, J.M., Agena, E.M. (2013). Time Management and Teaching Performance among Maritime and Engineering Faculty Members: Basis for an Intervention Plan, *International Journal of Academic Research in Progressive Education and Development*, 2(3): 42-61
- [38] Ylagan, A.P. (2013). Teaching Performance of the College of International Tourism and Hospitality Management, *Journal of International Academic Research for Multidisciplinary*, 1(7): 425-434
- [39] Abanador, J. R., Buesa, G. C. D., Remo, G. M. L., Mañibo, J. (2014). Teaching Methods and Learning Preferences in the Engineering Department of an Asian University, *International Journal of Academic Research in Progressive Education and Development*, 3(1), 1-15.
- [40] Laguador, J. M. (2014). Cooperative Learning Approach in an Outcomes-Based Environment, *International Journal of Social Sciences, Arts and Humanities*, 2(2), 46-55
- [41] Alcantara, F., Deligero, J.C.L., Laguador, J. M. (2015). Profile Aspirations of Maritime Students in one Higher Education in the Philippines, *Asian Journal of Basic and Applied Science*, 2(2).
- [42] Goff, L., (2010). Ontario University Council on Quality Assurance.Outcome-based Education. Available online, http://cll.mcmaster.ca/articulate/COU/Outcomes%20Ba sed%20Education%20Webinar/player.ht ml , Date retrieved: August 5 2014.