

John B. Lacson Foundation Maritime University (Arevalo), Inc.
Sto. Niño Sur, Arevalo, Iloilo City

Research Utilization
SY: 2019-2020

Title of the Study & Authors	Findings	Recommendations	Person Responsible	Action to Take	Results/Impact/Evidence
<p>1. Development of a Supplemental Learning Material in Mathematics for Seamanship 2B (Trim and Stability)</p> <p>Ms. Clarence Kay D. Soliva and C/M Teodosio S. Melliza</p>	<p>The results of the study showed that the mathematics concepts embedded in Seamanship 2B lessons were: (1) Integers, (2) Fractions, (3) Decimals, (4) Percent, (5) Algebra, and (6) Trigonometry. It was also found that students have a “Very High” satisfaction towards the supplemental material when taken as a whole and in terms of physical aspects, objectives, learning activities, evaluation procedure, and usefulness. On the other hand, experts were of the opinion that the supplemental learning material has a “Very High” acceptability when taken as a whole and in terms of physical aspects, objectives, and usefulness. However, experts found that it only has a “High” acceptability in terms of learning activities, and evaluation procedure. Thus, the supplemental learning material in Seamanship 2B is appropriate,</p>	<p>The university may use this supplemental learning material in improving students’ mastery of important mathematics lessons needed in Seamanship 2B. Similarly, future researchers may conduct an experimental study to determine if the use of this supplemental learning material may improve students’ academic performance in Seamanship 2B or another developmental research to produce similar supplemental learning materials for other maritime and general education subjects.</p>	<p>2/M Venerando C. Lamasan, Ph.D.</p>	<p>Increase the number of units of NGEC 9 (Mathematics, Science, and Technology) from 3 units to 5 units to give the students more hours to do different mathematical exercises in order to enhance their skills in solving mathematical problems which will be used onboard ship.</p>	<p>NGEC 9 Instructor’s Guide (IG)</p>

	<p>relevant, and useful in general and in terms physical aspects, objectives, learning activities, and evaluation procedure. It has also met the expectations and standards of chosen experts as reflected on their evaluation rating.</p>				
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<p>2. Basic Swimming Skills Enhancement: The Development and Use of SHS Physical Education Instructional Guide</p> <p>Dr. Emily T. Galo and Mr. June Raymund Peter V. Flores</p>	<p>Results showed that in the pretest, the control group had a higher mean than the experimental group and the Mann-Whitney test showed that there was a significant difference between the two groups. Result showed that there was no significant difference in the pretest of the control and experimental group before the treatment but when the treatment was introduced, findings showed that there were significant differences in the swimming skills in the pretest and posttest of experimental and control groups as well as in the posttests of both groups. The developed instructional guide improved the basic swimming skills endurance of the respondents. Though description on the skills in swimming speed did not significantly changed, statistically, a significant difference was noted indicating that enhancement of skills was attained.</p>	<p>Based on this result, it can be implied that the instructional guide is an effective instructional tool in improving students' basic swimming skills.</p>	<p>Dr. Corazon P. Brown</p>	<p>Instructional Guide in Swimming be used in PE classes of Grade 12 SHS</p>	<p>Improved swimming skills and endurance by SHS students</p>


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<p>3. Technology: The Impacts of Technology-assisted Instruction on the Academic Performance and Satisfaction of Selected BSMT Students</p> <p>Mary Mae Jun P. Esmaya, Eppie May F. Frial, and Cecilia C. Salinas</p>	<p>Results showed that the grand average GWA in prelim was 87.25%, 90.17% for midterm, and 88.46% in the tentative final. Specifically, the average prelim GWA are as follows: Blackwall - 86.67%, Bowline - 86.65%, Carrick Bend - 84.79%, Lineman's Knot - 87.98% and Polaris 1B - 90.15. On the other hand, the average midterm GWA are as follows: Blackwall - 89.05%, Bowline - 91.20%, Carrick Bend - 87.56%, Lineman's Knot - 90.08% and Polaris 1B - 92.95%. It appears that the average midterm GWA increased as compared to the average prelim GWA. Furthermore, the average tentative final GWA are as follows: Blackwall - 87.90%, Bowline - 88.28%, Carrick Bend - 84.82%, Lineman's Knot - 87.80% and Polaris 1B - 93.48%. Meanwhile, the grand average (combination of terms) per section are as follows: Blackwall - 87.87%, Bowline - 88.71%, Carrick Bend - 85.75%, Lineman's Knot - 88.62% and Polaris 1B - 92.19%. In addition, there was a significant difference in the grand average GWA</p>	<p>Based on the aforementioned findings, the following recommendations are directed to:</p> <p>1. Students. They must be given more opportunities to explore the learning process. They should not only be limited to learning within the four walls of the classroom. They should as well keep pace with their own learning through the use of technology. Other platforms should be introduced to them in order to develop their skills in manipulating technology which is one of the key skills required for millenials.</p> <p>2. Instructors. They must be given training opportunities in the use of the different technology platforms used in teaching and learning activities. They must be made aware of the different uses of technology in facilitating learning. They must be adept in using technology in advancing quality education.</p> <p>3. Administration. Top management should provide budget in purchasing technology facilities and equipment as well as training opportunities especially for teachers who will serve as facilitators</p>	<p>Z/M Venerando C. Lamasan, Ph.D.</p> <p>Dr. Corazon P. Brown</p> <p>Mrs. Cristy H. Cangrejo</p>	<p>JA applied for the development of IDIG to open its door in the blended learning using the online approach. The instructors were trained to upload modules, use, and manipulate the Blackboard platform</p> <p>Students should be exposed to learning opportunities and methodologies</p> <p>To be included in the Training Plan for SY: 2019-2020</p>	<p>Use of Blackboard OLMS to all courses facilitated by the e-learning Center.</p> <p>More competent students who are adept in the use of technology as a tool for learning.</p> <p>Training Plan for SY: 2019-2020</p>

	<p>in the subject Understanding the Self among selected BSMT students when classified according to section. Bonferroni test for multiple comparisons revealed that Polaris 1B students had the highest average GWA while Blackwall and Carrick Bend had the lowest average GWA. On the other hand, the following are the key determinants that affect the satisfaction of the students in the use of technology for the subject Understanding the Self: accessibility, facilitate integration of learning, eco-friendly learning style, time saver, and compilation of documents is made easy. The trend of the grand average GWA per term, from 87.5 % (prelim) increased to 90.17% (midterm), and slightly decreased to 88.46% (tentative final) showed that the effective use of technology had an impact the performance of students in the subject Understanding the Self. There was an increase in the grand average GWA from 87.5 % (prelim) which increased to 90.17% (midterm) because students were</p>	<p>in the learning process.</p>			
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	<p>adept in the use of technology since it was introduced to them during the prelim. Moreover, their focus was not disrupted because very minimal school activities took place during the prelim and midterm. There was a slight decrease in the tentative final GWA (88.46%) due to lack of submission of the activities and tasks. This was caused by lack of focus because it was during the tentative final term that a lot of school activities took place. The variations in the grand average GWA per section (Pol 1B - 92.19%, Bowline - 88.71%, Lineman's Knot- 88.62%, Blackwall - 87.87%, and Carrick Bend- 85.75%) showed that the label of section to which students are assigned affect how they also perform. Their performance showed that they perform according to whether they are in the top section or not. This also showed that the sectioning of students by the Dean's Office allows students to be grouped accordingly.</p>				
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<p>4. Peer Mentoring: A Teaching Strategy in Improving Students' Attitude Towards Mathematics</p> <p>Ms. Mary Joy M. Anas and 2/M Josito Cordero</p>	<p>The results of this study revealed that the students' attitude towards Mathematics in pretest and posttest was "Positive." This means that students were confident enough and can solve mathematical problems. There was also a significant difference in students' attitude before and after peer mentoring. Thus, peer mentoring has a positive impact to the students in terms of their attitude towards Mathematics.</p>	<p>In the light of the results and conclusions, the following recommendations are offered:</p> <ol style="list-style-type: none"> 1. Students are encouraged to participate in peer mentoring activities. 2. Mathematics teachers are encouraged to use peer mentoring as a teaching strategy. 3. Teachers must determine the academic performance in Mathematics with the use of peer mentoring. 4. School administrators and curriculum makers may consider strengthening the implementation of peer mentoring. 	<p>Dr. Corazon P. Brown</p>	<p>Give more importance to peer mentoring to enhance the institution in the classroom</p>	<p>Students who have concern for their fellow students, who unselfishly give their time to mentor their peers</p>

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<p>5. Minimizing Grade 11 Student's Absenteeism Through Counselling</p> <p>Ms. Auredlene T. Enriquez and C/M Carlos III D. Victoriano</p>	<p>The results of the study showed that before the intervention, 18 students were recorded out of 42 as absent for four weeks. Meanwhile, after the intervention, only seven out of 42 were absent for four weeks. Moreover, there was a significant difference in the attendance of the students before and after the intervention which simply means that counselling as an intervention is effective.</p>	<p>The following recommendations were drawn:</p> <ol style="list-style-type: none"> 1. Instructors must apply counselling upon the early signs of chronic absenteeism to increase the school attendance of the students which greatly affects their academic standing. 2. It is imperative to reach these at-risk students early using counselling to ensure that students attend school on a regular basis since it is necessary for them in reaching their full potential. 3. Instructors must provide other forms of interventions such as positive reinforcements like immediate rewards and incentives for students to attend school with higher frequency. 4. Some interventions must be used to target a particular factor causing absenteeism after it was addressed. Students struggling with absenteeism are often struggling in more than one facet of life. Therefore, addressing absenteeism becomes a channel through which we can provide support and encouragement to students in need. 	<p>Dr. Corazon P. Brown</p>	<p>The SHS recognizes the importance of counselling. The parents are notified immediately when students make 2 or more absences. Advisers go out of their way to talk to their students to emphasize the importance of being in school.</p>	<p>Lesser dropouts which are caused by absenteeism</p>

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<p>6. Difficulties Encountered in Seamanship 1 During Academic Assessment</p> <p>Ms. Grail D. Funtanilla and 2/M Joel J. Malaya</p>	<p>The results of the study revealed that the most common difficulty encountered by the students in Seamanship I during academic assessment is the graphics found in the assessment. Graphics and illustrations were unclear and confusing and the time allotted for the exam was not enough.</p>	<p>The researchers further recommend that:</p> <ol style="list-style-type: none"> 1. Thorough review of the items in the assessment should be done specifically focusing on the illustrations or graphics. 2. Further researches are to be conducted regarding the other difficulties that students encounter in the different competencies of the academic assessment of all year levels. 3. Further researches must be conducted giving emphasis on content of the assessment subject for item analysis especially to those school years where students got low percentages. 4. Finally, this is recommended to be used as an added conceptual material for teachers and students who study and need to study on the similar field. 	<p>2/M Isidro T. Estremadura, Ph.D.</p>	<p>The said issue was already resolved. The Assessment instrument was saved in the computer as power point file for clearer image viewing for the assessment takers. The time allotment is 45 minutes for 60 items of identifying parts of the ship which is very basic for BSMT students.</p>	 <p>The evidence consists of four screenshots from a PowerPoint presentation. The first screenshot shows a diagram of a ship's hull with labels for 'Hull', 'Deck', 'Superstructure', and 'Bottom'. The second screenshot shows a diagram of a ship's deck with labels for 'Deck', 'Superstructure', and 'Bottom'. The third screenshot shows a diagram of a ship's hull with labels for 'Hull', 'Deck', 'Superstructure', and 'Bottom'. The fourth screenshot shows a diagram of a ship's hull with labels for 'Hull', 'Deck', 'Superstructure', and 'Bottom'.</p>

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<p>7. Review of the Performance of the JBLFMU-Arevalo Students in Maritime School Assessment Program for 2018</p> <p>Ms. Pamela R. Ganza and 2/M Jerry A. Alingalan</p>	<p>The assessment results indicated that the scores obtained in the recent 2018 MSAP varied and had an above average remarks. In the Achievement Test, both BSMT scholar and non-scholar students who took the MSAP examination earned low scores in the Mathematics subject. Meanwhile the results for Aptitude Test showed that both BSMT scholar and non-scholar students obtained high and above average rating. In the Technical Test, it showed that BSMT non-scholar students have better scores. BSMT scholar students attained the highest mean score among the Aptitude Test in the Number and Letter Series. The second highest scores of BSMT student MSAP takers for 2018 were obtained from the Technical Test category. All components of the Technical Test showed that the percentage rate attained by the BSMT student MSAP takers were above average. All three categories such as Achievement Test, Aptitude Test and Technical Test indicated that there</p>	<p>It is recommended that both BSMT scholar and non-scholar students should be given more intensive review in the Mathematics subject. In addition, BSMT non-scholar students must also focus in Science where they also found difficulty. The BSMT student MSAP takers need to maintain the results that they obtained in MSAP 2018 while more improvements are needed with the skills in the Technical Test. Lastly, the BSMT non-scholar MSAP takers should be given more attention especially in the review.</p>	<p>2/M Venerando C. Lamasan, Ph.D.</p>	<p>Course review should be conducted prior to sending the students to participate in the MSAP Assessment Program.</p>	

	<p>were significant differences from the results of BSMT scholar students and BSMT non-scholar students. In Achievement Test subjects the result showed that there was a significant difference in the overall scores of BSMT scholar and non-scholar students. There were significant differences in English and Mathematics while there was no significant differences between the scores of BSMT scholar and non-scholar students in Science. On the other hand however, the overall results of the Aptitude Test showed that there was a significant difference in the scores achieved by the BSMT scholar and non-scholar students which can be inferred that even though BSMT student MSAP takers of 2018 attained higher scores in the Aptitude Test, the scores varied from each other. Out of the four subjects included in the Technical Test, there were significant differences for Watchkeeping with Colreg and Navigation and with no significant differences for Cargo Handling and Stowage and Safety</p>				
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	<p>and Environmental Protection. Based on the results stated above, this study concluded that the BSMT scholar students obtained higher scores than the non-scholar students. Furthermore, the results showed that both the BSMT scholar and non-scholar students found Mathematics under the Achievement Test as the most difficult subject. Aside from this, the BSMT non-scholar students also experienced difficulties in Science which also under the Achievement Test category.</p>				
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<p>8. Cooperative Learning: Students' Attitude Towards Disaster Readiness and Risk Reduction</p> <p>Ms. Richen Mae M. Taba and 2/M Frank C. Capaciete</p>	<p>The findings of this study revealed that the mean score of the respondents' pretest was lower compared to the results of the posttest. Nevertheless, the students' attitude before and after the intervention was "Positive." This means that students find that working in groups gives opportunities to express their opinions. Furthermore, there is better quality for the work is divided equally. Moreover, there was a significant difference in the students' attitude before and after the intervention. The findings simply showed that using cooperative learning as a strategy makes a difference in the students' attitude towards DRRR.</p>	<p>In view of this, it is recommended that teachers should utilize cooperative learning in other areas to enliven the teaching-learning process, encourage participation among students, collaborate ideas based from prior one, and heighten students' attitude in all courses with proper supervision.</p>	<p>Dr. Corazon P. Brown</p>	<p>Emphasize and constantly use cooperative learning</p>	<p>Development of a more active class where members are used to working together in order to deliver excellent results.</p>

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<p>9. Canonical Correspondence Analysis of Mollusks and the Physico-Chemical Parameters in Igang Bay Marine Sanctuary, Guimaras, Philippines</p> <p>Kristen J. Sora, Engr. Roberto Neal S. Sobrejuanite, and Dr. Brian Gil S. Sarinas</p>	<p>This study found that after eight years, the sites within the IBMS are comparatively the same outside in terms of diversity and even community. Additionally, the benthic composition and physico-chemical parameters were not found to influence the community structure. Further research needs to be conducted to determine which anthropogenic factors are negatively affecting the bivalves and gastropods of the seagrass beds in Igang Bay.</p>	<p>Recommendations for IBMS: Stronger management measures need to be in place as the seagrass bed within the IBMS is <1 hectare and is in decline. However, these specific measures cannot be identified until more research is conducted to determine the reasons for this decline. Secondly, from our conclusions we recommend that the borders of the IBMS are expanded to include the healthier seagrass community at Alubijod White Sand Public Beach in Guimaras, Philippines to protect this fragile community.</p> <p>Recommendations for Future Studies: The methods used for this study are more appropriate for a large, healthy, and dense seagrass bed. As the sites for this study were small with many patches of bare sediment, future studies in the IBMS should include more quadrats with a reduced distance between transects. As physico-chemical parameter values measured for both sites were similar, other factors must be affecting the community (composition,</p>	<p>Dr. Shirley G. Hampac</p>	<p>The system-wide CES will work with a new partner to help rehabilitate some areas of the Igang Bay Marine Sanctuary that need to be strengthened.</p> <p>Also, through our collaboration with the Marine Institute, Canadian interns assigned to us can help us undertake researches based on the recommendations.</p>	<p>A proposed partnership with GIZ is very positive since this March 2020, a planning workshop along this area has already been set.</p>

		<p>diversity, evenness, density), seagrass canopy height, or ecosystem services (protection, structure, food, niches). Other anthropogenic influences onto the seagrass beds to be studied include: tourism, pollution, or fishing at the Villa Igang Beach Resort and Alubijod White Sand Public Beach.</p>			
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<p>10. Water Physico-chemical Characteristics of Iloilo Batiano River, Philippines: A Baseline Study</p> <p>Bartimeues Nathan Wiederhold, Tom Lichtenberg, Dr. Roderick R. Germo, and Dr. Brian Gil S. Sarinas</p>	<p>Results revealed that ECC, temperature, and calcium content of the river exceed their limits except for pH level. Furthermore, ECC and temperature were statistically different except for pH values. This study concludes that the river is highly polluted and requires attention from all sectors of society.</p>	<p>The city government of Iloilo must focus its attention in saving Batiano River. A water filter and litter trap can be placed in the middle of Stations 1 and 2, then at the middle of Stations 5 and 6, and finally, at the end point of Station 6 to filter wastes and litter before these get further downstream or even flow into the Iloilo Strait. Secondly, saltwater intrusion can be countered by lowering the high amount of extracting of freshwater from the groundwater system. Furthermore, different stakeholders such as the Local Government Units (LGU's), private sectors, and residents must strategize to save Batiano River before it's too late.</p>	<p>Dr. Shirley G. Hampac</p>	<p>1. Encourage more collaborators in the clean-up drive</p> <p>2. More education should be given to the residents surrounding the river</p> <p>3. JA to sustain the implementation of the "Adopt a Linis Estero" program in collaboration with DENR and other stakeholders.</p>	<p>Another study should be done as a follow up of the previous study to determine improvement or decline of the water quality in Batiano River.</p> <p>A copy of the results of the study will be given to the LGU and the DENR-EMB 6</p>

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