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Level of Environmental Awareness and Practices of Faculty and Students of PSU Lingayen Campus

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Abstract *–This study sought to determine the level of awareness on the state of Philippine Environment and the practices of students and faculty of Pangasinan State University Lingayen Campus this school year 2011-2012. Specifically, this study attempted to determine the level of awareness of students and teachers on the following environmental concerns; Forest , Freshwater and Marine ecosystem, Pollution, Energy sources. It Included their common practices on the development and rehabilitation of the environment, their usual sources of information of as to the state of Philippine environment. A set of randomly selected faculty and students served as the various strata in the sample selection process. A questionnaire was utilized to collect the needed data , were then subjected to qualitative and quantitative data analysis. Findings showed that there had been a generally increasing trend of environmental awareness among teachers and students and they practiced certain ways to protect the environment. It was recommended that schools must enforce a system of accountability in schools for adverse effects of teachers and students environmental practices.*

Keywords *– .environmental awareness, environmental practices , environmental issues*

INTRODUCTION

The goals of Environmental Education is to provide every person with the opportunities to acquire knowledge, values, attitudes, commitment and skills needed to protect and improve the environment. It helps to create new patterns of behavior on individuals, groups and the society as a whole towards the environment. Along with education, information and communication advocacy is considered an indispensable strategy to make people aware of their environment and the various efforts to conserve the same. In the light of the current situation of the various ecosystems and the problems/issues requiring immediate solutions, there is really a need to know more about our changing environment.

OBJECTIVES OF THE STUDY

This study sought to determine the level of awareness on the state of Philippine Environment and the practices of students and faculty of Pangasinan State University Lingayen Campus this school year 2011-2012. Specifically, this study attempted to answer the following questions;

1. What is the level of awareness of students and teachers on the following environmental concerns;
   a. Forest ecosystem
   b. Freshwater ecosystem
   c. Marine ecosystem
   d. Pollution
   e. Energy sources
2. What are the common practices of students and teachers on the development and rehabilitation of the environment as regards to the above –mentioned concerns?
3. What are the usual sources of information of students and teachers as to the state of Philippine environment?
4. Is there any correlation between the respondents level of awareness and practices on the development and rehabilitation of the environment?
5. Is there a significant relationship between the student's field of specialization/program and their level of environmental awareness?
6. Is there a significant relationship between the students field of specialization/program and their level of environmental practices?
7. Is there a relationship between the teachers educational attainment, academic rank, years of experience and their environmental awareness/practices?

MATERIALS AND METHODS

This study was concerned in determining the level of environmental awareness and practices of students and teachers of Pangasinan State University, Lingayen Campus. The different ecosystem considered are the Forest, Freshwater, Marine, the issue of Pollution, and Energy Sources. The different sources of information was also included. The correlation of the respondents awareness and practices in the rehabilitation

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of the environment was also considered. The students field of specialization and the teachers educational attributes such as their educational attainment, rank and number of teaching experiences were correlated to their level of environmental awareness and practices. A questionnaire designed to elicit the information on their awareness and practices with regards to the development and rehabilitation of the environment was utilized. The data were subjected to qualitative and quantitative data analysis method employing appropriate statistical tools to answer the research problems. Weighted Means were used in obtaining the average typical awareness, practices, and sources of information of the respondents. T-test was employed to compare the responses of the teachers and students. Kruskall-Wallis and Fischer Exact test were utilized to test the hypothesized relationship of the respondents' awareness/practices and their educational attributes.

RESULTS AND DISCUSSION

Table 1 displays the sampling ratio of the respondents that were surveyed in the study which indicates that a total of 1,743 students or nearly 25% of the students total population. This suggest that one out of four students in PSU Lingayen actually took part in the study and more than half of the teachers responded to the questionnaires given them.

Table 1: Sampling Ratio of the Respondents to the actual Population

Respondents	Frequency	Total	Ratio
1. Students	1743	7026	24.81%
2.Teachers/Faculty	80	140	57.14%

Of these surveyed students and teachers, pertinent information were solicited to provide the bases for the answers to the research problems and hypothesis.

A. Environmental Awareness

Table 2: Respondents Awareness on Forest Ecosystem.

Forest Ecosystem	STUDENT Mean	Descriptive Equivalent	TEACHERS Mean	Descriptive Equivalent
1.In terms of forest cover, the mt. and forest land w/in the region are below the ideal.	2.99	*Average*	3.22	*Moderate*
2.Deforestration is at a higher rate than reforestration.	3.28	*Average*	3.62	*High*
3.Extensive reforestration is the chief cause of floods and soil erosion.	3.71	*High*	3.8	*High*
4. Loss of endangered and rare birds and animals result from over capture and habitat destruction.	3.59	*High*	3.65	*High*
5.Only a few hectares of commercial timber/hardwood forest remain.	3.28	*Average*	3.27	*Moderate*
Average Weighted Mean	**3.37**	*Average*	**3.51**	*High*

t = -1.9246 p = .0544

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In terms of Forest Ecosystem, both respondents exhibited moderate (3.37) to high awareness (3.51). Both respondents were moderately aware that forest cover and forestland are now below the ideal and that only a few hectares of forest remain. While both respondents are highly aware that this massive deforestation is the chief cause of floods, soil erosion, and loss of endangered species, result of the t-test (p=.0544) suggest that there is no significant difference in the environmental awareness of the teachers and students as far as forest ecosystem is concerned.

Table 3: Respondents Awareness on Freshwater Ecosystem.

	STUDENT		TEACHERS	
Freshwater Ecosystem	**Mean**	**Descriptive Equivalent**	**Mean**	**Descriptive Equivalent**
1.The country has more than 500,000 hectares of principal rivers, lakes, and other freshwater system.	2.98	Average	3.06	Average
2.Our freshwater systems are the second chief sources of fishes and other fishery products.	3.4	High	3.54	High
3. The dwindling potable water supply is due to poor forest cover.	2.97	Average	3.25	Average
4.Poor watershed management results in salt water intrusion.	2.96	Average	3.35	Average
5.The freshwater systems face serious degradation due to indiscriminate fishing and pollution.	3.49	High	3.57	High
Average Weighted Mean	3.16	Average	3.35	Average

t = -2.4338 p = .015

With regards to Freshwater ecosystem, both respondents perceived average (3.16 and 3.35) awareness on rivers, lakes, dwindling potable water supply and poor watershed management while high awareness is shown on the adverse effect on the freshwater ecosystem by indiscriminate fishing and pollution. Using the t test, it show that the teachers are more environmentally aware than the student when it comes to knowledge on freshwater ecosystem.

Table 4: Respondents Awareness on Marine Ecosystem

	STUDENT		TEACHERS	
Marine Ecosystem	**Mean**	**Descriptive Equivalent**	**Mean**	**Descriptive Equivalent**
1.Coral reefs and mangrove forests are the principal features of the marine ecosystem.	3.46	*High*	3.65	*High*

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2.Aside from nursery grounds for marine organisms, coral reefs prevent our shore from erosion.	3.39	*Average*	3.54	*High*
3.destruction of coral reefs is caused largely by illegal fishing, collection for ornamental and construction purposes, siltation, and industrial and agricultural pollution.	3.82	*High*	3.89	*High*
4.Mangroves serve as breeding grounds for marine animals, provide shoreline protection, and promote natural land reclamation.	3.51	*High*	3.78	*High*
5.Mangrove degradation is attributed to the expansion of fishponds and coastal communities and harvesting for fuel and wood.	3.27	*Average*	3.44	*High*
Average Weighted Mean	3.49	*High*	3.66	*High*

t = -1.8707 p = .0615

On the subject of Marine Ecosystem, both respondents exhibited high awareness especially on the issue of destruction of coral reef and mangrove degradation, its causes and implications. The teachers have higher mean awareness rating (3.66) to the students mean awareness (3.49), t-test result indicates that there is no significant differences in the mean awareness of the two respondents . This imply that both the respondents have high awareness towards marine ecosystem.

In Table 5, it shows that both respondents are highly aware of the different environmental pollution with a mean rating of 3.82 and 3.64 respectively. Both respondents are very much aware on the different sources of pollution of air, water and soil. They believed anthropological activities are the causes of the environmental degradation.

Table 5: Respondents Awareness on Environmental Pollution.

Pollution	**STUDENT**		**TEACHERS**	
	Mean	**Descriptive Equivalent**	**Mean**	**Descriptive Equivalent**
1.Solid wastes are thrown almost everywhere.	3.95	*High*	4.11	*High*
2.Improperly disposed waste attract disease-carrying organisms.	3.91	*High*	4.13	*High*

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3.Solid wastes, when burned, cause air pollution.	4.03	*High*	4.12	*High*
4.Non-biodegradable substances like plastics are the chief land pollutants.	3.88	*High*	4.15	*High*
5.The cost of solid waste disposal on the part of the local government is very expensive.	3.32	*Average*	3.58	*High*
6.The two major sources of water pollution are domestic/household sources and industries.	3.37	*Average*	3.76	*High*
7.The waters of the urban centers of the Philippines exceed the coliform count standard for recreational water.	3.2	*Average*	3.37	*Average*
8.water pollution is the prime suspect of the Red Tide phenomena.	3.57	*High*	3.8	*High*
9.Mine wastes pollute our seas and other water system.	3.54	*High*	3.75	*High*
10.Epidemics of typhoid fever, dengue fever, and other enteric diseases are traced to water pollution.	3.75	*High*	3.65	*High*
11.Air pollution levels in urban centers of the Philippines exceed the World Health Organization (WHO) standards.	3.39	*Average*	3.26	*Average*
12.Motor vehicles are the biggest contributors to air pollution.	3.78	*High*	3.74	*High*
13.Industrial firms rank second as contributors to air pollution.	3.56	*High*	3.48	*High*
14.Air pollution results in global warming.	4.01	*High*	4.02	*High*
15.Air pollutants cause respiratory diseases in man and are extremely toxic to plants.	3.71	*High*	4.63	*High*
16. Noise as a pollutant is the least known and least publicized.	3.31	*Average*	3.67	*High*
17.Noise causes deafness, high blood pressure, and even heart diseases.	3.47	*High*	3.56	*High*
18.Noise pollution disturbs people's concentration and relaxation.	3.8	*High*	3.86	*High*
19.Noise pollution comes from amplified music, transportation, construction activities, household appliances, and industrial plants.	3.63	*High*	3.91	*High*
20. Noise pollution results in poor communication.	3.56	*High*	3.79	*High*
Average Weighted Mean	3.64	*High*	3.82	*High*

t = -2.3227 p = .0203

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Table 6: Respondents Awareness on Energy Resource

Energy Sources	STUDENT Mean	STUDENT Descriptive Equivalent	TEACHERS Mean	TEACHERS Descriptive Equivalent
1.Before the 70's, the country's energy supply was basically dependent on imported coal, a fossil fuel.	2.94	*Average*	3.16	*Average*
2.At present, the sources of energy are; geothermal, coal, biomass, hydropower, oil, and fuel wood.	3.42	*High*	3.53	*High*
3.Coal is the only energy source which is not harnessed in the Philippines.	3.11	*Average*	2.94	*Average*
4.Geothermal energy has been increasingly developed.	3.3	*Average*	3.21	*Average*
5.solar power has not yet gone beyond the pilot project stage.	3.08	*Average*	3.14	*Average*
Average Weighted Mean	3.17	*Average*	3.2	*Average*

t = .1973 p = .8436

Both the teachers and students have practically the same level of awareness with regards to Energy Sources, as shown by the two exhibited average or moderate awareness (3.17 and 3.2). The only high awareness in this part is on the subject of alternative sources of energy such as geothermal, coal, biomass, hydropower, oil, and fuel wood. .

B. Environmental Practices

On the respondents' practices regarding the development and rehabilitation of the environment, results showed that the teachers were more responsive towards the rehabilitation of Forest Ecosystem. Although both teachers and students are considerably aware of the deteriorating state of Forest Ecosystem, the teachers do more often the rehabilitating practices mentioned in the questionnaire.

Table 7: Respondents Practices on Forest Ecosystem.

Forest Ecosystem	STUDENT Mean	STUDENT Descriptive Equivalent	TEACHERS Mean	TEACHERS Descriptive Equivalent
1. I join groups in undertaking tree planting activities.	3.02	*Sometimes*	3.05	*Sometimes*
2. I discouraged my peers/students from cutting trees in their lots and forests.	3	*Sometimes*	3.67	*Often*
3. I tell my peers/students not to capture rare and endangered birds and animals to maintain biological diversity.	3.32	*Sometimes*	3.65	*Often*
4.I discuss with my peers/students the importance of reforestration and ill effects of deforestration.	3.22	*Sometimes*	3.56	*Often*

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5.I participate in educational drives on reforestration.	3.21	*Sometimes*	3.26	*Sometimes*
Average Weighted Mean	3.15	*Sometimes*	3.44	*Often*

t = -3.4361 p = .0006

Table 8 shows the current practices of both respondents regarding freshwater ecosystem. It shown that both respondents are highly aware of the present state of freshwater ecosystem, but their environmental practices on such revealed that teacher do more often some positive practices towards freshwater ecosystem. Although students have also shown high awareness regarding freshwater ecosystem, their corresponding practices, however, fall short and they are sometimes passive in their practices compared to the teachers.

Table 8: Respondents Practices on Freshwater Ecosystem.

Freshwater Ecosystem	**STUDENT** **Mean**	**Descriptive Equivalent**	**TEACHERS** **Mean**	**Descriptive Equivalent**
1.I do not throw garbage in rivers, lakes, and other freshwater areas.	3.38	*Sometimes*	4.09	*Often*
2. I consider the watershed as "untouchable area".	3.32	*Sometimes*	3.91	*Often*
3.I discuss with my peers/students the importance of forest cover in water potability.	3.29	*Sometimes*	3.57	*Often*
4.I keep clean the freshwater ecosystem.	3.55	*Often*	3.93	*Often*
5. I discuss with my peers/students the bad effects of indiscriminate fishing and pollution of freshwater ecosystem.	3.37	*Sometimes*	3.55	*Often*
Average Weighted Mean	3.38	*Sometimes*	3.81	*Often*

t = -4.5794 p = .0000

Table9: Respondents Practices on Marine Ecosystem.

Marine Ecosystem	**STUDENT** **Mean**	**Descriptive Equivalent**	**TEACHERS** **Mean**	**Descriptive Equivalent**
1. I protect the remaining reefs of the country by not collecting them.	3.34	*Sometimes*	3.88	*Often*
2.I discuss with my peers/students the importance of coral reefs.	3.17	*Sometimes*	3.64	*Often*

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3.I discuss with my peers/students the disadvantages of using explosives and poisons in fishing.	3.18	*Sometimes*	3.57	*Often*
4. I discuss with my peers/students the importance of mangroves.	3.18	*Sometimes*	3.57	*Often*
5. I keep clean the marine ecosystem.	3.51	*Often*	3.81	*Often*
Average Weighted Mean	3.28	*Sometimes*	3.69	*Often*

t = -4.5794 p = .0000

With regards to their practices towards marine ecosystem, it can be seen from table 9 that teachers are more consistent and do more often remedial practices such as 'protecting the remaining reefs by not collecting them and discussing with peers/students the importance of coral reefs/mangroves as well as explaining the disadvantages of explosives and use of poisons in fishing.

Table 10: Respondents Practices on Environmental Pollution

Pollution	STUDENT Mean	Descriptive Equivalent	TEACHERS Mean	Descriptive Equivalent
1. I do not throw solid wastes in the streets and neglected lots.	3.41	*Often*	4.13	*Often*
2.I properly dispose household wastes to keep away disease-carrying organisms.	3.66	*Often*	4.25	*Always*
3.I do not burn solid wastes to prevent air pollution.	3.44	*Often*	3.99	*Often*
4.I separate biodegradables from non-biodegradables when disposing solid wastes.	3.45	*Often*	3.99	*Often*
5.I participate in educational drives on solid waste management.	3.33	*Sometimes*	3.58	*Often*
6. I do not drink water of unknown source.	3.58	*Often*	4.13	*Often*
7. I do not throw wastes in rivers and other bodies of water.	3.64	*Often*	4.28	*Always*
8. I do not take a bath in polluted seas and rivers.	3.73	*Often*	4.3	*Always*
9.I do not buy mussels and other shellfishes when the red tide alert is up.	3.7	*Often*	4.25	*Always*

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10.I participate in information drives on the ill effects of water pollution.	3.35	*Sometimes*	3.64	*Often*
11. I plant trees around our home and school to counteract the effects of pollution.	3.44	*Often*	3.73	*Often*
12.I see to it that at home and in school, proper ventilation is always provided.	3.42	*Often*	4.04	*Often*
13. I encouraged friends to stay in the rural areas to avoid pollution in urban areas.	3.26	*Sometimes*	3.53	*Often*
14.I discourage peers/students from smoking.	3.62	*Often*	4.09	*Often*
15. I prefer to work in a smoke-free area.	3.63	*Often*	4.38	*Always*
16.I see to it that at home and in school, all noise-causing appliances/equipment are controlled.	3.55	*Often*	4.04	*Often*
17.I frequently go to a quiet place for relaxation.	3.73	*Often*	4.17	*Often*
18. I suggest to bus/jeepney drivers to tone down their stereos and video machines.	3.04	*Sometimes*	3.41	*Often*
19.I prefer to hear soft than amplified music.	3.44	*Often*	3.96	*Often*
20.I do not go to noisy malls and video houses.	3.33	*Sometimes*	3.68	*Often*
Average Weighted Mean	3.48	*Often*	3.98	*Often*

t = -6.5858 p = .0000

As gleaned from table 10, both respondents often do practices against environmental pollution with a rating of 3.48 and 3.98, respectively.

It can be observed that teachers tend to always practiced the following such as to keep away disease-carrying organisms they disposed household waste properly, they do not throw waste on any bodies of water, they do not drink water of unknown origin and preferred to work in smoke free environment. While students sometimes practiced to separate biodegradable from non biodegradable, participate in information drive, and bravely request drivers to tone down the stereos inside the different transport system.

Table 12: Respondents Practices on Energy Sources.

	STUDENT	**TEACHERS**

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Energy Sources	Mean	Descriptive Equivalent	Mean	Descriptive Equivalent
1.I see to it that all lights and appliances are off before leaving home and school.	3.78	*Often*	4.33	*Always*
2. I walk when travelling short distances.	3.76	*Often*	4.13	*Often*
3.I use the conventional sun drying instead of electric dryers.	3.58	*Often*	3.8	*Often*
4.i discuss with my peers/students the tapping of indigenous energy resources.	3.19	*Sometimes*	3.54	*Often*
5. I discuss with my peers/students ways of energy conservations.	3.31	*Sometimes*	3.71	*Often*
Average Weighted Mean	3.52	*Often*	3.9	*Often*

t = -4.0741 p = .0000

With regards to energy sources, Practices such as 'turning off the lights before leaving home /school and using conventional sun drying techniques rather than electric dryers are some of the commendable practices done both by the teachers and students. The respondents are moderately aware and are conscious, and mindful of practices that would help in the conservation of energy sources.

C. Sources of Information on the Environment

On the subject of the sources of environmental information, TV, news, books and informal sources (friends and family members) is considered by both the teacher and student-respondents as the information sources they were "often exposed" to. On the other hand, Radio, Periodicals, Formal Sources (lectures, seminars) were perceived as sources they are "sometimes exposed" to.

In this regard, it can be said that TV (4.04), Books (3.66), News (3.45) and informal sources (3.54) are the respondents' main sources of Environmental information as shown by mean ratings of 4.04, 3.66 and 3.45 respectively. However, using the mean awareness comparison test, it can be shown that teachers are 'more exposed' than the students on these three sources of information, hence, this finding tend to suggest that teachers rely more on TV, books, informal sources, and news when it comes to environmental information.

Table 13: Respondents Sources of Information on the Environment.

Usual Sources of Information	STUDENTS Mean	STUDENTS Descriptive Equivalent	TEACHERS Mean	TEACHERS Descriptive Equivalent	t	p	Conclusion
1. Radio	3.27	*Sometimes Exposed*	3.3	*Sometimes Exposed*	-0.1214	0.9034	*not significant*
2. TV	3.61	*Often Exposed*	4.04	*Often Exposed*	-3.0737	0.0021	*significant*
3. News	2.99	*Sometimes Exposed*	3.45	*Often Exposed*	-3.7461	0.0002	*significant*

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4. Periodicals	3.06	*Sometimes Exposed*	3.2	*Sometimes Exposed*	-1.2436	0.2138	*not significant*
5. Books	3.41	*Often Exposed*	3.66	*Often Exposed*	-1.8799	0.0603	*not significant*
6. Unpublished Materials	2.94	*Sometimes Exposed*	3.16	*Sometimes Exposed*	-1.8501	0.0645	*not significant*
7. Formal(seminars, lectures etc)	3.08	*Sometimes Exposed*	3.29	*Sometimes Exposed*	-1.521	0.1284	*not significant*
8. Informal (friends, family members etc)	3.55	*Often Exposed*	3.54	*Often Exposed*	0.0593	0.9527	*not significant*
9. actual experiences/observations	3.43	*Often Exposed*	3.88	*Often Exposed*	-3.7745	0.0002	*significant*

Table 13 shows the respondents sources of information, that television, books and through informal sources such as friends and family members are often their sources of information with regards to environmental issues. It is then that media is a very strong source of information for the public. It is the fastest way of reaching out to the people. Books followed as a source of information. Lastly they have an actual experiences and observations on what is happening to our environment.

D. Correlation between the Respondents Awareness and Practices with regards to the Development and Rehabilitation of the Environment

Table 14: Correlation between the Students Environmental Awareness and Practices

Environmental Concerns	Variable	Means	Correlation	p	Conclusion
1. Forest Ecosystem	Awareness	3.37	0.2985	0	*Students Environmental awareness and practices are significantly correlated*
	Practices	3.15			
2. Freshwater Ecosystem	Awareness	3.16	0.3474	0	*Students Environmental awareness and practices are significantly correlated*
	Practices	3.38			
3. Marine Ecosystem	Awareness	3.49	0.3028	0	*Students Environmental awareness and practices are significantly correlated*
	Practices	3.28			
4. Pollution	Awareness	3.64	0.56376	0	*Students Environmental awareness and practices are significantly correlated*
	Practices	3.48			

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5. Energy Sources	Awareness Practices	3.17 3.52	0.329	0	*Students Environmental awareness and practices are significantly correlated*

In all of the Environmental concerns covered in the study, student's environmental awareness and practices are highly correlated. This means that as their mean environmental awareness increases, their mean practices also increases. Statistically, it is shown that the teacher's environmental awareness and practices on all the five ecosystem studied are highly correlated. This implies that more awareness for the teachers results to positive actions from them, as the data gathered indicate that teachers mean practices increase when their awareness also increase.

All these findings tend to suggest that regardless of the type of respondents – students or teachers -- more awareness, coming from education and an intensified environmental information campaign results to positive practices from them in developing and rehabilitating the environment.

Table 15: Correlation between the Teachers Environmental Awareness and Practices

Environmental Concerns	**Variable**	**Means**	**Correlation**	**p**	**Conclusion**
1. Forest Ecosystem	Awareness Practices	3.51 3.44	0.3507	0	*Teachers Environmental awareness and practices are significantly correlated*
2. Freshwater Ecosystem	Awareness Practices	3.35 3.81	0.4858	0	*Teachers Environmental awareness and practices are significantly correlated*
3. Marine Ecosystem	Awareness Practices	3.66 3.69	0.4775	0	*Teachers Environmental awareness and practices are significantly correlated*
4. Pollution	Awareness Practices	3.82 3.98	0.5321	0	*Teachers Environmental awareness and practices are significantly correlated*
5. Energy Sources	Awareness Practices	3.2 3.9	0.3372	0.0022	*Teachers Environmental awareness and practices are significantly correlated*

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E. Relationship between the Students' field of specialization and their Environmental Awareness /Practices

Table 16: Relationship between the Students' field of specialization and their Environmental Awareness /Practices

Environmental Concerns A. Awareness	K Wallis	p	Conclusion
1. Forest Ecosystem	110.146	0.0001	Student course is sig. related to their environmental awareness
2. Freshwater Ecosystem	99.321	0.0001	Student course is sig. related to their environmental awareness
3. Marine Ecosystem	129.184	0.0001	Student course is sig. related to their environmental awareness
4. Pollution	203.314	0.0001	Student course is sig. related to their environmental awareness
5. Energy Source	42.337	0.0001	Student course is sig. related to their environmental awareness
B. Practices			
1. Forest Ecosystem	38.758	0.0001	Student course is sig. related to their environmental Practices
2. Freshwater Ecosystem	83.871	0.0001	Student course is sig. related to their environmental Practices
3. Marine Ecosystem	56.208	0.0001	Student course is sig. related to their environmental Practices
4. Pollution	221.866	0.0001	Student course is sig. related to their environmental Practices
5. Energy Source	1147.445	0.0001	Student course is sig. related to their environmental Practices

Using the Non-Parametric Kruskall Wallis test, it was shown that the students' program/field of specialization is significantly related to their environmental awareness and practices. Survey results showed that students from the curricular programs, AB English , BSMathematics, Bachelor of Secondary Education have the highest mean environmental awareness while students from the AB English, Bachelor of Secondary Education , Bachelor of Science in Nutrition and Dietetics have the highest mean environmental practices.

Students from Bachelor of Industrial Technology, AB Economics, and BS Public Administration have the lowest mean environmental awareness and practices on all environmental concerns. These students are found to be significantly different from other students in so far as their environmental awareness and practices are concerned. It is apparent that more environmental information and awareness campaign is in order for the three courses mentioned.

Table 17: Relationship Between Teachers Environmental Awareness and their Educational Attributes

Teachers Attributes	Environmental Awareness	Fishers Exact test p	Conclusion
A. Educational Attainment	1. Forest Ecosystem	0.137	*not significant*
	2. Freshwater Ecosystem	0.024	*significant*

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	3. Marine Ecosystem	0.122	*not significant*
	4. Pollution	0.212	*not significant*
	5. Energy Resources	0.812	*not significant*
B. Academic Rank	1. Forest Ecosystem	0.514	*not significant*
	2. Freshwater Ecosystem	0	*significant*
	3. Marine Ecosystem	0.018	*not significant*
	4. Pollution	0.321	*not significant*
	5. Energy Resources	0.162	*not significant*
C. Years of Experience	1. Forest Ecosystem	0.575	*not significant*
	2. Freshwater Ecosystem	0	*significant*
	3. Marine Ecosystem	0.134	*not significant*
	4. Pollution	0.022	*not significant*
	5. Energy Resources	0.102	*not significant*

With regards to the teachers environmental awareness, all their studied educational attributes such as educational attainment, academic rank, and Years of experience have been found to have no relationship with their environmental awareness except for their awareness on Freshwater Ecosystem. This means that there was no statistical evidence relating their educational profile variables to their environmental awareness except for the awareness on Freshwater ecosystem. That teachers awareness on Freshwater ecosystem is "average awareness", one of their lowest among the five environmental concerns. The significant awareness of the teacher is probably attributed by the geographical topography of the province which is surrounded by Lingayen Gulf and fishponds abound being the bangus capital of the country.

Table 18: Relationship Between Teachers Environmental Practices and their Educational Attributes

Teachers Attributes	**Environmental Awareness**	**Fishers Exact test p**	**Conclusion**
A. Educational Attainment	1. Forest Ecosystem	0.154	*not significant*
	2. Freshwater Ecosystem	0.072	*not significant*
	3. Marine Ecosystem	0.496	*not significant*
	4. Pollution	0.154	*not significant*
	5. Energy Resources	0.109	*not significant*
B. Academic Rank	1. Forest Ecosystem	0.152	*not significant*
	2. Freshwater Ecosystem	0.193	*not significant*
	3. Marine Ecosystem	0.704	*not significant*
	4. Pollution	0.348	*not significant*
	5. Energy Resources	0.711	*not significant*
C. Years of Experience	1. Forest Ecosystem	0.247	*not significant*
	2. Freshwater Ecosystem	0.143	*not significant*

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3. Marine Ecosystem	0.263	*not significant*
4. Pollution	0.123	*not significant*
5. Energy Resources	0.045	*significant*

With regards to the teachers 'environmental practices, all educational profile variables considered have been found to be not significant, there is no statistical evidence to correlate teachers environmental practices with their educational attainment, educational rank and years of experience.

Findings of the Study

Based on the analysis of the data gathered, the researchers came up with the following findings;

1 .Both teacher and student respondents have the same level of awareness which range from moderately to highly awareness in terms of forest ecosystem. In terms of freshwater ecosystem, both respondents are averagely aware but highly aware on the adverse effect of the indiscriminate fishing and water pollution. It also shows that teachers are much aware than the students in terms of the freshwater ecosystem .In marine ecosystem , both respondents are highly aware especially on issues of destruction of coral reefs and mangrove degradation. In terms of awareness on energy resources, both respondents have the same level of awareness which indicate they are just moderately aware on the issue.

2. With regards to environmental practices in the rehabilitation and protection of the destroyed environment, findings showed that teachers are more responsive towards the rehabilitation of forest and freshwater ecosystem than the students. But with regards to energy sources, both teachers and students have the same degree of practices. Both practices things that would minimize the use of energy.

3. Television, books and informal sources are considered the main source of the respondents vital information, while periodicals, lectures and seminars are sometimes perceived to be exposed in these information. However, teachers are more exposed to these sources of information than the students.

4. In correlation between the respondents awareness and practices with the development and rehabilitation of the environment, findings showed that both respondents level of awareness correspond to their level of practices. The more information they got from different sources of information enhances their level of awareness and practices.

5. Students taking up AB English, BS Mathematics, and Bachelor of Secondary Education (BSE) were found to have a high level of environmental awareness and at the same time AB English, Bachelor of Secondary Education (BSE) and Bachelor of Science in Nutrition and Dietetics (BSND) were found to be with high level of environmental practices on the different ecosystem. While students taking up Bachelor of Industrial Technology (BIT), AB Economics and BS Public Administration were least environmentally aware and at the same time have least environmental practices.

6. Teachers educational attributes such as educational attainment, academic rank and number of years of experiences have no corresponding relationship with their environmental awareness and practices.

CONCLUSION AND RECOMMENDATION

Conclusions

1 .Despite the absence of awareness-raising programs on environmental conservation and protection at Pangasinan state University Lingayen Campus, there had been a generally increasing trend of environmental awareness among teachers and students.

2 .Knowledge of the effect of practices of students and teachers to which the environment becomes is relevant to what it is now an emerging concerns.

Recommendations

1. Schools like the Pangasinan State University is urged to include courses on environmental management in their curricular programs.

2. Conduct researches on environment where emphasis should lean on the identification of priority researchable areas such as ecological balance, ecosystems productivity and equity.

3. Enforce a system of accountability in schools for adverse effects of teachers and students environmental practices.

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