

Level of Awareness among College Students towards Environmental Management System Implemented within the Lyceum of the Philippines University Cavite

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Abstract: The purpose of this study was undertaken to identify the demographic information of the students of Lyceum of the Philippines Cavite, which affects their level of awareness towards Environmental Management System of the University. To attain its objectives, the study utilized a type of quantitative data which is descriptive design method particularly survey studies. The primary source of data that has been used in this study is an interview. The researchers conducted an interview to the head officer of “EMS” Environmental Management System. Mr. Erick Andal is a respective Science Professor from College of Arts and Sciences Department which he was the head of this “EMS” Environmental Management System or the Green Productivity Team. The secondary sources of data are from survey questionnaire which the researchers distributed to the students from different colleges and year levels. The other sources of data are through online environmental sites, blogs and other documentaries related to environmental problems, issues and programs. The participants who answered the survey questionnaire are approximately 370-400 students from different colleges and year level, provided in survey questionnaire for the fulfillment of the objectives of our research study.

Keywords: EMS (Environmental Management System), Green Productivity Team, Awareness, Students, and Teaching Personnel.

I. INTRODUCTION

The study aims to identify the demographic information of the students of Lyceum of the Philippines Cavite, which affects their level of awareness towards Environmental Management System of the University. The researchers also aim to study the effect of Environmental Management System awareness to its students, most importantly the researchers' aims to enhance their awareness towards the programs and to know what improvements should be done to make the Environmental Management System effective and efficient.

A. Statement of the Problem

The study primary deals on identifying the level of awareness of students at Lyceum of the Philippines Cavite campus, towards Environmental Management System implemented by the University. Specifically, it was conducted to find out the answers to the following problems:

1. What is the demographic information that affects their awareness in terms of:
 - a) Gender;
 - b) Year Level; and
 - c) College

2. What is the level of awareness of the participants towards each Environmental Management System of Lyceum of the Philippines Cavite with regard to:
 - a) 5S System;
 - b) University Clean-Up Drive;
 - c) Tree Planting activities;
 - d) Botanical Garden; and
 - e) Waste Segregation?
3. Which improvements should be done in Lyceum of the Philippines University Cavite's Environmental Management System making it more effective and efficient?

B. Significance of the Study

The research was beneficial to:

Education. Through our research, the study will help the students maximize their learning efficiency. Having the awareness and participation towards Lyceum of the Philippines Cavite's Environmental Management System, will maintain its beauty, cleanliness and eco-friendly facilities. It will be a huge factor to students education and learning process by becoming more inspired to attend classes and encouraging the students on participating to each and every activities provided by the school.

Students. Through our research, the students will be aware to environmental management system of Lyceum of the Philippines Cavite and they will educate themselves by knowing all environmental problems and issues existing to our living environment, making them more inspired to participate and start to act for a change.

University. Through our research, our university will benefit by informing them on how many students are aware and not thoroughly aware of its Environmental Management System and the implications of the said programs. Our University will benefit also to the results of the research study by acknowledging our recommendations and solutions for improvements making the Environmental Management System more effective and efficient

Professors. Through our research, the professors can contribute awareness to the students by encouraging and imparting word wisdom to the students of Lyceum of the Philippines Cavite

Future Researchers. Our research, could also help as a reference for future researchers of the same study or the researcher who may want to continue the study.

II. LITERATURE REVIEW

Our environment is experiencing a global crisis in which it is constantly changing. There is no denying that. However, as our environment changes, so does the need to become increasingly aware of the problems that surround it, Universities plays an important role in performing some actions for the growth and development of our environment, introduction and developing an awareness to the students is the most important steps to enable the students, to participate to each and every programs that the university being provided. Volunteerism is the key goal of every environmental team which aims to develop this type of characteristics to an individual. So our team decided to make a study to our own university Lyceum of the Philippines University Cavite, regarding "Developing awareness to the students to the environmental programs". We aim to help our university to improve their programs and increase the awareness of the students resulting to volunteerism attitude which he/she will help no matter what happen and even there no benefits are included in his good will.

Global warming has become an undisputed fact about our current livelihoods; our planet is warming up and we are definitely part of the problem. However, this isn't the only environmental problem that we should be concerned about. All across the world, people are facing a wealth of new and challenging environmental problems every day. Some of them are small and only affect a few ecosystems, but others are drastically changing the landscapes of what we already know.

Our planet is poised at the brink of a severe environmental crisis. Current environmental problems make us vulnerable to disasters and tragedies, now and in the future. We are in a state of planetary emergency, with environmental problems

piling up high around us. Unless we address the various issues prudently and seriously we are surely doomed for disaster. Current environmental problems require urgent attention.

Synthesis

The review advances of the resources we've been gathered in our study based are on interviews, books, and other online resources that we had read and studied. Awareness plays an important role in participating to environmental programs being implemented throughout the university and many environmental projects been made by the environmental officers here at the Lyceum of the Philippines University Cavite Campus. The green productivity team or the "EMS" of the Lyceum of the Philippines University Cavite Campus, mission and concern is to protect, preserve, and sustain our environment. This activity is been headed by our professor Mr. Erick Andal. His good will on leading us on creating and implementing environmental projects is very helpful, and outstands his good solicitude personality even there is no monetary benefit they could have.

The Environmental Management System of Lyceum of the Philippines Cavite is certified under the Environmental Management System standard ISO 14001.

The Environmental Management System or Programs of Lyceum of the Philippines Cavite are:

1. Botanical garden.
2. Universities clean up drive.
3. Strengthening of the (5's) Sort, Set in order, Shine, Standardize, and Sustain. 5S is a phrase that refers to workplace organization and standardization. It is how areas organized, free of clutter, efficient, safe, and pleasant to work in.
4. Universities Tree Planting.

The simplest explanation why the environment matters is that, as humans, the environment- the Earth- is our home. It is where we live, breathe, eat, and raise our children. Our entire life support system is dependent on the well-being of all of the species living on earth.

5. Plastic Reduction Policy

III. METHODOLOGY

For this research study, the researchers used a Quantitative and Descriptive method of research. Descriptive design of research used to describe and/or interpret the data and characteristics about the population that is being studied by the researcher. It is a school survey, the study on internal characteristic of school system. Descriptive characteristics consist of the collection, organization, presentation and analysis of data. This type of statistics was used to describe the basic features of the data in a study. It provides simple summary about the sample and the measures. In this study we collected and analysed data determined, the level of awareness towards environmental management system and some list of recommendations should be done for the improvements of the Environmental Management System's effectivity and efficiency.

B. Figures, Graphs and Tables

Table 1: Level of Awareness of the Students of Lyceum of the Philippines Cavite, according to Gender.

	Chi-square value	P-Value	Interpretation
Awareness of the student to the Environmental Programs of Lyceum of the Philippines Cavite	10.27	9.48	Not significant

There is no significant difference in the level of awareness to the environmental programs of Lyceum of the Philippines Cavite as grouped according to gender of students in different college departments of the university. The significance of a gender orientation is unrelated to the students of being aware of the University's Environmental Management System.

Table 2: Level of Awareness of the Students of Lyceum of the Philippines Cavite, according to Year Level.

	Chi-square value	P-Value	Interpretation
Awareness of the student to the Environmental Programs of Lyceum of the Philippines Cavite	20.28	21.0261	Significant

As the result says there is a significant difference in the level of awareness regarding environmental programs of Lyceum of the Philippines Cavite as grouped according to the year level of students in the different colleges of the university. The Year level of the students has a great impact on having an awareness regarding the environmental programs. The higher year level, the higher the awareness of the students towards environmental management system.

Table 3: Level of Awareness of the Students of Lyceum of the Philippines Cavite, according to College.

CAMS	CAS	CBA	COECSA	CITHM
3.24	2.55	2.93	2.98	3.26

The result of these objectives based on the chart and information stated above, that CAMS, CBA, COECSA and CITHM are moderately aware of the Environmental Programs being implemented at the Lyceum of the Philippines Cavite and CAS has the lowest level of awareness which has 2.55 rating or somewhat aware to the environmental programs being implemented. Based on the result of the previous survey results as per college department are in the boarder of moderately aware and slightly aware. Mostly the CAS department is in charge on implementation of Environmental Programs of the Lyceum of the Philippines University – Cavite Campus, and yet they are the one who is in the lowest level of awareness according to the survey per college department.

Table 4: Mean response on the level of awareness towards each Environmental Management System/Programs

Environmental Management System/Programs	Mean	Interpretation
1. Have you heard of the Environmental Management System/Programs implemented by the Lyceum of the Philippines Cavite?	2.80	Somewhat Aware
2. Do you follow the 5'S System?	3.39	Occasionally/Sometimes
3. Have you participated in a University Clean-Up Drive?	3.56	Almost Every time
4. Have you participated in a Tree Planting Event conducted by the University?	2.69	Occasionally/Sometimes
5. Have you heard the implementation of Plastic Reduction Policy of the University?	3.41	Moderately Aware
6. Do you segregate your waste into proper designated bins?	3.17	Occasionally/Sometimes

Table 4 shows the level of awareness of the students towards each environmental management system/programs of Lyceum of the Philippines Cavite. As the results of the process of assessment to the students of Lyceum of the Philippines Cavite, the Environmental Management System of the University has 2.80 mean which means the students is somewhat aware of the programs implemented by the Lyceum of the Philippines Cavite and needs further enhancement of awareness to its students. The Results on the assessment of each environmental system/programs of Lyceum of the Philippines Cavite are; Participation of the students to the 5S system rule or the Sort, Set in Order, Shine, Standardize, Sustain has 3.39 mean in which the students follow the 5'S rule occasionally or sometimes; Participation in a University Clean-Up Drive has the result of 3.56 in which the students participate almost every time; Participation in a Tree Planting Event has the result of 2.69 in which the students participates occasionally or sometimes; the awareness of the students towards the implementation of Plastic Reduction policy has the result of 3.41 which means the students are somewhat aware about its

implementation of its program; lastly is the participation to segregation of wastes into proper designated bins has the result of 3.17 in which the students participate occasionally or sometimes only.

Table 5: Improvements to be done making the Environmental Management System/Programs Effective, Efficient and Enhances the Awareness of the Students of Lyceum of the Philippines Cavite

	Frequency	Relative Frequency
1. Additional activities to the curriculum of NSTP subjects for the development of skills and expertise, thereby providing appropriate solutions for the Environmental Challenges.	229	28.6
2. An articles regarding environmental programs and activities of the Lyceum of the Philippines Cavite, written in newspaper and magazines that will be distributed to each of the students.	171	21.3
3. Conduct a seminar programs regarding Environmental Education.	170	21.2
4. Advertisement regarding Environmental Management System/Programs like tarpaulin, leaflets, or banners posted on bulletin boards per college departments.	142	17.7
5. Room- to – room visit of the officers of the environmental programs	89	11.1
TOTAL	801	100.0

The results of the study as we conducted research survey questionnaire to the students of Lyceum of the Philippines Cavite for the benefit of the effectivity and efficiency of the Environmental Management System/Programs and most importantly is, it enhances the awareness of its students. Option number 4 has a biggest frequency value of votes by the students followed by option number 3, option number 1, option number 5 and lastly option number 2 which has the lowest votes by the students.

IV. CONCLUSION AND RECOMMENDATION

Conclusion:

Based on the findings of the study, the following conclusions were drawn:

The researchers distributed the survey questionnaire to every participants of Lyceum of the Philippines University Cavite by 35 female and 37 male participants per college department. And as a result on the Study, there is no significant difference in the level of awareness to the environmental programs of Lyceum of the Philippines University - Cavite as per gender of students from different colleges. Gender is not a basis to measure the awareness of an individual. There is significant difference in the level of awareness to the environmental programs of Lyceum of the Philippines University - Cavite as per year level of students from different colleges. As the students year level increased, the awareness increases also because of the experienced of an individual to the System and development of concern and awareness to its community. The results of the data that the researchers gathered based on the college department groups, shows that CITHM students got the highest awareness rating of all any other colleges which was 3.26 followed by CAMS students who got 3.24 rating which was point zero two difference behind CITHM students. CAS students got the lowest awareness rating which were 2.55. Based on this data all of the student of Lyceum of the Philippines University – Cavite who participate in the surveys shows that all of them were somewhat aware of the environmental programs of the said university because all of this level of awareness ratings falls on the bracket of 2.60 – 3.39 which was somewhat aware. But in terms of The Results on the assessment of each environmental system/programs of Lyceum of the Philippines Cavite are; Participation of the students to the 5’S system rule or the Sort, Set in Order, Shine, Standardize, Sustain has 3.39 mean in which the students follow the 5’S rule occasionally or sometimes, the results also can be seen by the students’ performance on maintaining the cleanliness of the universities premises, some classrooms after use are dirty and some are clean, students participate to 5’s system occasionally for instances if they wanted to; Participation in a

University Clean-Up Drive has the result of 3.56 in which the students participate almost every time, the results is relatively high because this activities are required on the curriculum of NSTP 1 Subjects; Participation in a Tree Planting Event has the result of 2.69 in which the students participates occasionally or sometimes, the results is relatively reasonable because it also a requirement to curriculum of NSTP II Subjects; the awareness of the students towards the implementation of Plastic Reduction policy has the result of 3.41 which means the students are somewhat aware about its implementation of its program, the results is reasonably high because the students encountered this policy usually when they were buying to the business food carts that offers food services at the Lyceum of the Philippines; lastly is the participation to segregation of wastes into proper designated bins has the result of 3.17 in which the students participate occasionally or sometimes only, we conclude that the student had its hard time to distinguish what is proper designated bins for their trash. The result of these objectives that will help develop and create awareness to the students of Lyceum of the Philippines University Cavite Campus. Option number 4 has a biggest frequency value of votes. This shows that the students really want a school activity that includes the awareness regarding environmental programs. Because in this way they can see what things that they can do, they can hear from the speakers what is the solutions, problems etc, and mostly they can learn and have fun simultaneously.

Recommendations:

The researchers recommend the following:

As for education our university provides additional curriculum related to environmental knowledge's an issues to discussed to all freshmen that having their NSTP I; and discussing recycling activities and procedures to the students of NSTP II. This is for the development of their creativity and most importantly their awareness to our environment; doing research projects for the innovation and development of its environmental programs for the betterment of future generations; having an extracurricular activity on the subject of NSTP II Delivering a recycle craft projects. To be graded by NSTP II advisors.

As for the students: mandatory participation on all of the environmental programs of the Lyceum of the Philippines University Cavite; strengthening the discipline of the students of the Lyceum of the Philippines University Cavite; every students will be caught littering will do community service which is the first offense would be eight hours of community service, for second offence would be an eight of community service per day within 3 days, and lastly for third offense would be and eight hours of community service per day would be completed within six days; those who caught violating any rules of the school will be penalized by the Student Affair Office (SAO)

As for the university: the Lyceum of the Philippines University Cavite must provide more plastic bottle bins because not all students will throw their plastics bottles which is located on the cafeteria because there is also a canteen at the roof deck of the campus; all the collected finished recycled products of the students will be offered and sell to market, for the generation of income and all outstanding crafts will compete to the art exhibits, by this activities will help market Lyceum of the Philippines University Cavite; all the profits that will gain from the recycled material will be used to fund the projects of the (EMS) Environmental Management System of the University; all extra plastic materials will be given to the foundation such as one for all, all for one the programs of Eat Bulaga. Through that we can help those who are in need of arm chair for their studies and to advertise the university simultaneously.

The professors: will be help strengthening the implementations of environmental programs of the Lyceum of the Philippines University Cavite; should give more time and a lot of efforts in participating with EMS and their programs because the campus will benefit a lot on maintaining and improving the waste management of the said campus.

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