

Assessment of Students' Engagement in Environmental Sustainability Initiatives in Higher Education

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ABSTRACT

The main goal of this study was to assess the level of students' involvement in the Eco-friendly schools' program of the university. The research employed the use of descriptive - correlational survey design. The sample for the study consisted of 489 students selected from six colleges using random sampling technique. The respondents of the study were the third year and fourth year students who were officially enrolled in the different colleges in the University.

Data collected were analyzed using inferential and descriptive statistics. The result of the study indicates that the students have high level of involvement in the eco-friendly schools' program in the university which revealed a high sense of responsibility in the protection and improvement of the environment. The study proves that the respondents' age and sex had no direct bearing with the level of involvement in the eco-friendly schools' program of the University. The results also indicate that the college where the students were enrolled had a direct influence on the level of involvement in the Eco-friendly schools' program. The study concluded that Environmental education should be strengthened in its implementation and should be expanded at all levels which could result into a sustainable development of the school environments.

KEYWORDS: Eco-friendly, Level of Involvement.

1. INTRODUCTION

This study aimed to determine the level of students' involvement in the Eco-friendly School Program of Biliran province State University. The study also includes demographic profile of the respondents as to their age, sex and the college where they are enrolled.

The University has always been an advocate in environmental conservation and Preservation. It has different programs and activities that promotes environmental awareness that aims to inspire students and employees to develop sense of compassion for the environment.

The University has been an awardee since school year of 2011 and 2013, It placed second in the search for the Most Sustainable and eco-friendly Schools in the region and in 2015, placed to be the first place winner in the regional level and finally in the 2017, the university has been awarded as the third place winner in the National level. This award serves as indicators for a program success which only proves that the University is committed in the protection and conservation of the environment.

The Sustainable and Eco-friendly school may be described as Environment-friendly schools that have initiated and integrated in their instruction, research, extension and other programs which are environment-related (EMB, 2016).

The Eco- friendly Schools program, also aims to empower students, by engaging them in fun and action-oriented learning, to be the change needed for a sustainable world. It also assumes to be a way to improve

students' learning outcomes, attitudes and behaviors on the environmental and sustainability challenges (Eco-Schools, 2013).

The search for the "Sustainable and Eco-friendly school Contest" is a national award program which was started in 2009. It is a governmental nationwide initiative to promote sustainable development and to improve students' Environmental literacy. The Eco-friendly schools program was developed by the Department of Natural Resources (DENR) thru the Environmental Management Bureau (EMB), Department of Education (DepEd), Commission on Higher Education (CHED) and SMART Communications.

The promotion of this program is for the establishment and strengthening of sustainable and eco-friendly schools in the country which has been enshrined as a priority in the ASEAN Environment Year 2015 with a theme "Empowering the Youth for a Clean and Green ASEAN" and likewise in the roadmap for the implementation of Republic Act No. 9512 also known as the National Environmental Awareness and Education

Act of 2008 under the National Environmental Education Action Plan for Sustainable Development (2009-2014).

The impact of the Student’s involvement in the eco-friendly schools’ program of the university has not yet documented. This gap is what the present study tends to answer. The outcomes of this study will serve as baseline data to evaluate the effectiveness of environmental program and activities in raising students’ environmental literacy and for improving and intensifying the existing environmental program of the University.

2. OBJECTIVES OF THE STUDY

This study generally aimed to determine the level of students’ involvement in the Eco-friendly school program of the university.

It specifically sought to answer the following questions:

1. Determine the profile of the respondents in terms of:
 - 1.1 Sex;
 - 1.2 Age; and
 - 1.3 college where they are officially enrolled;
2. Determine the level of students’ involvement in Eco-friendly school’s program;
3. Ascertain the significant relationship between the profile of the respondents and the level of students’ involvement in Eco-friendly schools’ program

3. THEORETICAL AND CONCEPTUAL FRAMEWORK

This study is anchored on the Theory of Involvement developed by Alexander Astin (1999). The Theory of Involvement postulates that the effectiveness of any educational policy or practice is directly related to the capacity of that policy or practice to increase student involvement (Astin, 1999). In relation with the different policies and program about environmental awareness, the students were able to actively participate and involve themselves in the different environmental activities of the university. This environmental awareness program was always integrated not only in instruction, research but also in the extension services rendered by the university to the community.

The study captured the demographic profile of the respondents in terms of age, sex and the college where they are enrolled. It also includes the level of students’ involvement in the eco-friendly school program of the university.

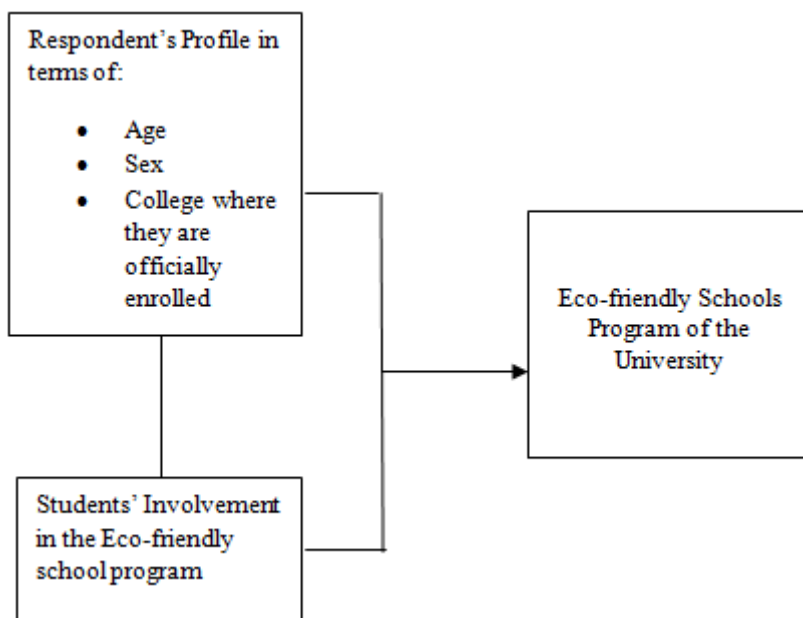


Figure 1. Theoretical and Conceptual framework of the study

4. METHODOLOGY

This study adopted the descriptive-correlational research design. The usual procedure in data gathering was through a survey questionnaire. The questionnaire was personally given to the respondents by the researcher in which they were informed about the nature of the study.

The Eco-friendly Schools questionnaire used was developed by Tayawan (2013) and was modified by the researcher which was used for gathering data on the students' level of involvement in the Eco-friendly schools' program of the university.

The subjects of the study were the third year and fourth year students who were officially enrolled in the different colleges in the University. The respondents were chosen as to the number of years they have spent in the university for they were already enrolled when the school had won as the eco-friendliest school in the region.

The Colleges involved in the study were: Arts and Sciences, Industrial Information and Communication Technology, Education, Engineering, and Maritime Education. The sample size of 489 was taken from the total population of students who were officially enrolled in their respective colleges.

The research data were processed using descriptive statistics such as frequency and percentages were used to summarized and described demographic variables. Weighted Mean was used to determine the students' level of involvement in the Eco-friendly Schools Program of the university. In testing the hypotheses, Chi-square, Pearson-Product Moment Correlation and Probability values were used.

5. RESULTS AND DISCUSSION

Profile of the Respondents

The respondents of this study consisted of the third year and fourth year students who were officially enrolled in the different colleges in the University.

Age. Table 1 shows that majority of the respondents ages ranged from 18 to 19 years old. Only 57 or 11.66 percent were 22 years old and above and 9 or 1.84 percent are 17 years old and below. The above data would imply that most of the students were in their appropriate age as third and fourth year college student.

Sex. As shown in the above data, most of the students were female with a frequency of 262 or 53.6 percent while the 227 or 46.4 percent were male. It only indicates that some colleges like the College of education and Tourism have more female enrollees compared with the male.

College. As reflected in the table, the biggest college was the College of Arts and Sciences (CAS) which includes 18.40 percent of the student respondents, followed by the College of Education (COED) with 18.40 percent. College of Maritime education with 16.80 percent, College of Industrial, Information and Communication technology with 16.21 and College of Tourism with 15.70 percent. The College of Engineering is the smallest college with 14.70 percent of the student population. This only indicates more students were enrolled in the College of arts and sciences.

Table 1: Profiles of the Respondents

Profiles	f	%
Sex		
Male	227	46.40%
Female	262	53.60%
Total	489	100%
Age		
22 years old and above	57	11.66%
20 – 21 years old	152	31.08%
18 – 19 years old	271	55.42%
17 years old and below	9	1.84%
Total	489	100%
College		
College of Arts and Sciences	90	18.40%
College of Industrial, Information and Communication Technology	79	16.21%
College of Engineering	72	14.70%
College of education	89	18.20%

College of maritime education	82	16.80%
College of Tourism	77	15.70%
Total	489	100%

Student’s Level of Involvement in the Eco-friendly Schools Program

Table 2 displays the level of involvement of the students in the eco-friendly school’s program of the university. The results indicated a total average weighted mean of 3.57 where the students claimed that they were very much involved in the different eco-friendly schools’ activities in the university. Based from an average weighted mean of 4.10, the students were involved also in water conservation as they stressed that they are very much involved in closing faucets and other water passages every after use. They also claimed that they were involved with eco-club/ organizations that made activities for the conservation, preservation and protection of the environment.

Table 2. Student’s Level of Involvement in the Eco-friendly Schools Program

Indicators	AWM	Description
1. Picking up wrappers or pieces of paper whenever seen them in the campus.	3.53	Much involved
2. Helping water the plants in school garden/ landscape areas in the campus.	3.16	Involved
3. Helping other students in cleaning the canals or in conducting clean-up drive in the campus.	3.10	Involved
4. Joining eco-clubs/organization that make activities for the conservation, preservation and protection of the environment.	2.97	Involved
5. Participating in tree-planting activities either subject, organization or school-based.	3.49	Much involved
6. Segregating biodegradable, non-biodegradable and recyclable waste materials.	3.41	Much involved
7. Helping the classroom clean as well as helping maintaining the cleanliness of the school campus.	3.92	Much involved
8. Helping our school in reducing the waste materials through recycling.	3.60	Much involved
9. Encouraging other students and friends to update themselves with environmental issues and concerns by attending environmental symposiums/activities in the campus sponsored by organizations or by the institutions.	3.33	Involved
10. Writing or calling/notifying student leaders to express different views about environmental problems in the campus.	3.03	Involved
11. Turning-off the lights, computers and other electrical appliances when they are not in use.	4.05	Much involved
12. Closing the faucets and other water passages properly every after use.	4.10	Much involved
13. Avoiding picking/cutting flowers in the school garden.	3.72	Much involved
14. Supporting student candidates who are concerned with answering environmental problems and issues.	3.57	Much involved
15. Recycling used paper.	3.80	Much involved
16. Switching off running water taps in school campus.	3.91	Much involved
17. Supporting the environmental policies of the school.	3.82	Much involved
18. Participating in waste management activities in school.	3.58	Much involved
19. Participating BrigadaEskwela and clean-up drive in the campus.	3.69	Much involved
20. Participating and encouraging others to support the clean and green program of the school.	3.63	Much involved
AWM	3.57	Much involved
❖ 4.21– 5.0 (Very much involved)	2.61 – 3.40 (Involved)	
3.41 – 4.20 (Often/Much involved)	1.81 – 2.60 (Less involved)	
1.00-1.80 (Not involved at all)		

This would imply that students have high level of involvement in the eco-friendly schools’ program in the university which exhibited high sense of responsibility in the protection and improvement of the environment.

Relationship of Variables

The relationship between the Profile of the respondents and their level of involvement in the Eco-friendly Schools Program of the university is presented in table 3. As observed, the age of the respondents and the students' involvement in the eco-friendly school's program has an r - value of 0.039 which means that there is a negligible relationship between these two variables. A p- value of 0.392 which is greater than 0.05 alpha level of significance also proves that there is no sufficient evidence that age is directly correlated to the students' level of involvement in the Eco-friendly school's program in the university.

Table 3. Relationship between the Profile of the Respondents and their Level of Involvement in the Eco-friendly Schools Program

Variables	X ²	df	r-value	p-value	Interpretation
Age	-	-	0.039	0.392	H ₀ Accepted
Sex	8.243	4	-	0.083	H ₀ Accepted
College	32.463	20	-	0.039	H ₀ Rejected

Chi-square analysis was conducted and it obtained a value of 8.243 with a degree of freedom of 4 at 0.05 alpha level of significance was found to have a p-value of 0.083 which indicates that sex and the students' involvement in the Eco-friendly school's program had no significant relationship. However, the College where the students were enrolled is associated with their level of involvement in the Eco-friendly schools' program in the university as indicated in the calculated chi-square value of 32.462 with a degree of freedom of 20 at 0.05 alpha level of significance that corresponds to a p-value of 0.039.

This only indicates that the age and sex of the students has nothing to do with their level of involvement in the Eco-friendly schools program. On the other hand, the college where the students were enrolled has a direct bearing with their level of involvement in the eco-friendly school's activities implemented by the university.

6. CONCLUSION

The result of the study shows that students have high level of involvement in the eco-friendly schools' program in the university which revealed high sense of responsibility in the protection and improvement of the environment. It also indicates that the profile of the respondents specifically the age and sex have no direct bearing with the Students' level of involvement in the Eco-friendly schools' program of the university. On the other hand, the College where the students were enrolled had a direct influence on their level of involvement since it was the college who were responsible in educating the students about environmental conservation and protection.

7. RECOMMENDATIONS

Based from the findings and conclusions, the following recommendations are made.

The College should intensify its implementation of environmental education through symposia, trainings, seminars on issues regarding solid waste management, recycling and other sustainable regular activity to promote environment conservation and protection. Teachers should encourage students to take responsibility for creating and enjoying a sustainable future through engaging different activities using critical thinking skills and values that will make them participate in policymaking about environmental issues.

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