A PROPOSED ENVIRONMENT MANAGEMENT MODEL FOR REGION IV-BASED DE LA SALLE SCHOOLS IN THE PHILIPPINES

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by

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ABSTRACT

Title: A Proposed Environment Management Model for Region IV-Based De La Salle Schools in the Philippines

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The Problem

The study evaluated the existing model of De La Salle Dasmariñas Environmental Management Resource Center (ERMAC) and present environmental management scenario of the four (4) Region IV-based schools of De La Salle Philippines as assessed by its faculty and administrative staff, and among business firm owners and barangay chairmen in the subject schools' vicinity towards development of an environmental management model.

Specifically, the study aimed to answer the following questions:

1. What is the present environmental management scenario of De La Salle University – Dasmariñas' ERMAC model?

2. How do the respondents assess the environmental management scenario of the four (4) Region IV-based schools of De La Salle Philippines in

terms of resource conservation, pollution prevention, solid waste management, and health and safety.

3. Is there a significant difference in the assessment of the four groups of respondents in the environmental management scenario of the four (4) Region IV-based schools of De La Salle Philippines in terms of resource conservation, pollution prevention, solid waste management, and health and safety?

4. What are the barriers encountered by the respondents in relation to the promotion of the environmental management?

5. What are the suggestions of the respondents in relation to the promotion of environmental management?

6. Based on the present scenario, what environmental management model could be evolved to enhance the environmental management scenario of the four (4) Region IV-based schools of De La Salle Philippines?

Research Methodology

The descriptive method was utilized and the survey technique was used in gathering data. Three hundred thirty two (332) out of one thousand nine hundred sixty one (1961) served as respondents. Data were gathered during the first and second quarters of the year 2007 using a researcher-made questionnaire. The data were treated using frequency count and percentage, mean and weighted mean, and ANOVA to test the hypothesis.

Findings

The following major findings resulted from the study:

1. The De La Salle University Dasmariñas has an existing office that manages the environmental management programs and activities of the campus. The office is known as Environmental Resource Management Center (ERMAC) which is the center of the university that initiates, implements, supervise, and evaluates all its environmental and environmental-related researches, programs and advocacy. The funds for the projects and initiatives of the center come from budget allocation of the university's general fund, income generated from the Material Recovery Facility (MRF), and sponsorship from the various sectors inside and outside the university. Lacking at the moment are programs and projects that will promote resource conservation of materials, water and energy; air, water and noise pollution prevention and reduction; and specific programs and projects related to health and safety for a more comprehensive environmental management program for the university.

2. All the four groups generally gave positive ratings on the three indicators of resource conservation. In terms of pollution prevention, all the four groups generally gave positive ratings on the three indicators of pollution prevention. All the four groups generally gave positive ratings on the three indicators of solid waste management. Also, all the four groups generally gave positive ratings on the three indicators of health and safety.

3. In terms of **resource conservation**, there was a significant difference on the ratings of the four groups of respondents based on the computed *F* value equal to 3.013 with a probability of error equal to 0 .030 (*p < .05)*. The null hypothesis was thus rejected. By multiple comparisons, this difference occurred between the faculty and the business sector. The mean difference is equal to 0.747, *p < .05,* where respondents from the business sector reported higher ratings.

The ANOVA result for the assessment on **pollution control** shows that the four groups did not differ in their assessment. The computed *F* is equal to 1.246, *p < 0.293.* The null hypothesis could not be rejected.

The test for significance of difference in the respondents' assessment on the **solid waste management** shows that the computed *F = 0.275 (p < 0.843)* is too small to detect a significant different among the four groups' assessment. The value is not found to be significant at *p < .05.* Thus, the null hypothesis could not be rejected.

The ANOVA result pertaining to the four groups' assessment on the environmental **health and safety** measures reveal that the findings are consistent with pollution prevention and solid waste management because the environmental health and safety variable also received similar ratings from the four groups. This is depicted by the computed *F = 0.811, p < 0.489.* Since the probability of error exceeds the tolerable 5% margin, the null hypothesis likewise could not be rejected.

4. The barriers in the promotion of environmental management as identified by the four groups of respondents show that the most dominant problem is the *absence of or inefficient technology,* followed by *budget constraint,* the third most dominant is *passive community participation,* placing fourth is *poor educational campaign,* on the fifth place is *inadequate waste disposal facilities,* the sixth and the last place is *non-inclusion in the school environment program.*

5. The most dominant suggestion is *information campaign on waste reduction segregation, recycling and reuse and proper waste disposal;* followed by *allocation of budget allotted in the acquisition and installation of equipment to minimize pollution.* The third most dominant is *procurement preference to reusable, refillable, durable and repairable equipment,* fourth is *information campaign on waste reduction segregation, recycling and reusing and proper waste disposal;* on the fifth place is *enacting institutional policies and installing an office responsible for the environmental programs and advocacy;* the sixth place is *regular meetings as a forum of discussion on health and safety,* on the seventh place is *creation of an incentive program that will encourage employee participation,* the eight place is *prohibiting open burning of waste to prevent air pollution,* the ninth and the last place is *anti-littering policies in offices and campus.*

Conclusions

In the light of the above-mentioned findings, the following conclusions were drawn:

1. The review of the present De La Salle University Dasmariñas Environmental Resource Management Center (ERMAC) revealed the fact that the present model is focused on solid waste management program only. Lacking are programs and projects that will promote resource conservation of materials, water and energy; air, water and noise-pollution prevention and reduction; and specific programs and projects related to health and safety which will result to a more comprehensive environmental management program for the university.

2. The respondents agree that De La Salle conserves resources by selecting sustainable materials, minimizes water and electricity; prevents pollution by selecting materials with zero or low-off gassing of harmful air emissions and by discharging liquid waste through the public sewerage system and septic tank and applying grease traps on its kitchen sinks to minimize water pollution, and by providing programs for noise-pollution reduction; manages solid wastes by incorporating solid waste management that prevents waste generation, sorting waste as to biodegradable and non-biodegradable, and by prohibiting the use of Styrofoam; and provides program for health and safety by fostering the atmosphere of a safe and pleasant workplace, applying rigorous standards and preventing environmental or safety-related accidents.

3. There exists a significant difference on the ratings of the four groups of

Recommendations

In the light of the conclusions arrived at, the following recommendations are suggested:

1. The use of the proposed model that will include programs not limited to solid waste management only, but will cover areas that will promote resource conservation, pollution prevention and health and safety.

2. Improvement of the proposed model should it be applied.

3. Dissemination of the results of the study to Schools of De La Salle-Philippines in order to provide a good concept of environmental management which could be helpful in their environmental programs to address issues such as resource depletion, pollution problem, waste generation and health and safety matters.

4. Due attention to lowest rating given by faculty members in the area of resource conservation and pollution prevention, by the barangay chairmen and businessmen on solid waste management and health and safety. This may be in terms of involving these barangay chairmen and businessmen in the planning and implementation of the program.

5. Similar researches to be conducted in other schools of De La Salle - Philippines. These schools should also make inquiries into the status of their environmental management compliance so that if similar problems and deficiencies are found, concerted effort may be exerted to improve the environmental management scenario of De La Salle - Philippines in general.

6. Further studies involving other type of industries to be made to find out different practices on environmental management on a wider variety of *industries.*

7. Extension studies to be conducted to involve other demographic variables as well as other factors like the inclusion of student assessment for future studies.