
Environmental Sustainable Practices in the Selected Higher Education Institutions in Calapan City

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Abstract

Sustainability is the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs. While, environmental sustainability is concerned with the protection of resources and maintenance for the future generations. Given its primary role as knowledge producer, higher education can serve as a powerful tool to help create a more sustainable future. This study aims to come up with a Sustainable Development Campus Consortium Program that could be instrumental in enhancing and strengthening the environmental sustainable programs, policies and practices of the academic institutions. It aims to provide higher education institutions with array of activities or programs designed to potentially improve their respective programs and practices for the benefit of the institution, other stakeholders, and for the environment sustainability in general. Three private higher education institutions in Calapan City were chosen as subjects of the study namely, Divine Word College of Calapan, St. Anthony College of Calapan and Southwestern College of Maritime, Business and Technology to identify the different environmental sustainable practices, curriculum integration and institutional assessment of campus sustainability measures. Results gathered from the study manifested that all of the participating schools have different environmental sustainable practices and they have programs and activities that focus on curriculum integration. These practices impact the higher education institutions campus wide actions and their adopted communities. However, they have no formal institutional assessment of campus sustainability measures to ensure the success of these environmental sustainable practices.

Keywords: sustainability; environmental sustainability; environmental sustainable programs; institutional assessment of campus sustainability measures.

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1. Introduction

Sustainability is the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs. It is the capacity to improve the quality of human life while living within the carrying capacity of the earth's supporting eco-systems [4]. While, environmental sustainability is concerned with the protection of resources and maintenance for the future generations. It focuses on the long-term health of ecosystems, intergenerational decision making, renewable resources, consequences of man-made global warming, protection of species diversity and ecological structure, treating environmental resources as if they have intrinsic rights and value and targeting social welfare or happiness [7]. However, as populations increase and we have relied on the earth's natural resources such as minerals, petroleum, coal, gas and so on, the earth's natural ecosystems and creatures from birds to insects to mammals have declined which has had a negative impact on both humans and other living systems [4]. Over the past several decades, efforts have been made at the global, national, state, and local levels to increase attention paid to environmental sustainability. Most notably, goal of United Nations' Millennium Development Goals is to Ensure Environmental Sustainability. In order to meet these goals, we must first develop an environmentally-literate people [6]. Given its primary role as knowledge producer, higher education can serve as a powerful tool to help create a more sustainable future. Thus, the concept of education for sustainable development has become one of the core educational initiatives to help address many of the problems associated with human development. Indeed, higher education's role in creating a sustainable future will presumably take on a greater importance as the world continues to become increasingly globalized and interdependent [1]. Furthermore, universities have played many roles in transforming societies, by educating decision-makers, leaders, entrepreneurs, and academics. However, education and research on sustainability in universities is at an early stage in many institutions [5]. For universities to comprehensively address sustainability, a 'learning for sustainability' approach needs to be embedded across every aspect of institutional operations in a synergistic way [8]. While efforts to integrate Education for Sustainable Development at universities have been increasing, said integration has not been occurring fast enough to counteract the unbalanced nature of humanity's interactions with the planet. A number of studies have delved into the possible barriers slowing this progress and incentives to increasing sustainability practices on campus [3]. In the province of Oriental Mindoro, Calapan City has come up with projects supporting the barangay green initiatives that focus on environmental management education. The City of Calapan instituted public partnerships for the establishment of mangrove forest, solid waste segregation, river rehabilitation program, urban backyard gardening and tree planting. However, this project wouldn't be successful without the help of the community specially the educational institutions. Hence this study is focused on assessing the Environmental Sustainable Practices of the different Higher Education Institutions in Calapan City to develop an environment sustainability consortium that will support the project of our government in achieving our goal.

2. Materials and Methods

Research design This qualitative study made use of the phenomenological research approach. Creswell defines qualitative research as a holistic approach that involves discovery. It also described as an unfolding model that occurs in a natural setting that enables the researcher to develop a level of detail from high involvement in the

actual experiences. One identifier of a qualitative research is the social phenomenon being investigated from the participant's viewpoint. What constitutes qualitative research involves purposeful use for describing, explaining, and interpreting collected data. Phenomenological approach to qualitative research focuses on the commonality of a lived experience within a particular group. The fundamental goal of the approach is to arrive at a description of the nature of the particular phenomenon. Typically, interviews are conducted with a group of individuals who have first-hand knowledge of an event, situation or experience. Other forms of data such as documents, observations and art may also be used. The data is then read and reread and culled for like phrases and themes that are then grouped to form clusters of meaning. Through this process the researcher may construct the universal meaning of the event, situation or experience and arrive at a more profound understanding of the phenomenon [2]. With this design, the researcher had a clear picture of the environmental sustainable practices in the selected Higher Education Institutions in Calapan City.

Subjects of the study

Subjects of this research came from three selected private higher education institutions in Calapan City. Three subjects per HEI were interviewed to gather pertinent data- firsthand account of their lived experiences in supporting the environmental sustainability in the campus. Subjects was purposively selected to ensure the representation of the faculty of the HEIs.

Population and sample

Purposive sampling was employed to identify and select the participants from the three private higher education institutions in Calapan City. An individual, face-to-face, interview or a virtual interview via zoom meeting was utilized to gather pertinent information from the subjects. A total of nine (9) participants were identified as subjects of this study. Three (3) subjects was purposively selected from each HEI.

Research instrument

In this study, the researcher used a self-made interview guide approved by the research adviser and panel of validators. There was on set of questions for all the interviews. Interview was done one-on-one via zoom meeting. Series of relevant questions were asked to draw substantial responses from the participants to make the interview as in-depth as possible. The analysis and interpretation of the data were based on the audio taped and transcribed interview sessions.

Data gathering procedure

Specific subjects from each HEI were identified considering the criteria that they are teaching subjects related to environmental sustainability. After seeking permission from the HEI President or Administrator, the researcher requested for an interview schedule with the selected subjects done at their most convenient time. The researcher likewise followed a three-phase process in conducting the interview sessions. Phase one involves providing the subjects with an overview of the study. Also, the researcher discussed the interview protocol and informed the subjects that the interview will be recorded. Phase two will be the interview proper where

participants were allowed to expound on presented questions and share their experiences and perceptions. The last phase was the closing of the interview session.

3. Results

The selected higher education institutions (HEI) in Calapan City had different programs for environmental sustainability practices; i.e., efficient waste management, reduce, reuse, recycle, planting ornamental plants, energy efficiency, school gardening, organized programs inside and outside the campus like mangrove planting and rehabilitation, Naujan lake conservation project, community immersion and income generating projects from recyclable materials. Moreover, HEIs discussed the preparation done for the programs and part of that would be the implementation and monitoring of the activities for environmental sustainable practices. The first thing to do was educating students, faculty, employees and different organization to the different programs of the school about environmental sustainability. Tapping other government institutions for the program in the community along with optimizing the role of the school as an agent of change with regard to sustainability. The selected private higher education institutions (HEIs) in Calapan City had programs and activities that focused on curriculum integration and institutional assessment of campus sustainability measures. The following subjects learned inside the classroom were integrated into environmental awareness like environmental science, marine pollution and in NSTP class. However, there was no formal structures for campus sustainability measures from the HEIs which participated in the study. The following practices for environmental sustainability, though informally set up, impacted the higher education institutions' environmental awareness which included proper waste disposal, Eco-Friday, campus vegetable garden, Bangklase, and coastal clean-up drive. These contributions were evident in the adopted community of the institutions like barangay Calero, Wawa, Naujan Lake and Camilmil. The proposed sustainable campus consortium program was tailored to restructure, enhance and strengthen the environmental sustainable practices of the higher education institutions (HEIs). It includes the seven steps in constructing the sustainable development campus consortium program; organizing the development work, initial review, prioritization of sustainability aspects, policy and program, resources and instructions, training and communication, assessment and follow-up.

4. Conclusions

1. The selected private higher education institutions (HEI) in Calapan City have different practices for environmental sustainability.
2. The selected private higher education institutions (HEIs) in Calapan City have programs and activities that focus on curriculum integration but have no formal institutional assessment of campus sustainability measures to ensure the success of these environmental sustainability practices.
3. The different environmental sustainable practices impact the higher education institutions (HEIs) campus wide actions and activities in their adopted communities.
4. The proposed sustainable campus consortium program will be of great aid for higher education institutions (HEIs) to better deliver the programs and activities for environmental awareness.

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TO GOD BE THE GLORY!

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