

Community-Based Eco Activity: An Out-of-School Youth Environment Education Program

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Abstract:- The study explores the awareness, comprehension, and views on environment education (EE) program of fifteen (15) selected out-of-school youths (OSYs). It uses the exploratory sequential method which employed the EE toolkit, questionnaires, and interview guide as data gathering tools. Results showed that the participants' levels of awareness and comprehension of the environmental principles, EE concepts, and skills have significantly increased after the program. The OSYs viewed EE activities to be beneficial and relevant, which positively changed their attitudes toward the environment. Thus, the OSYs' knowledge on environmental issues has been heightened through the EE program. However, though the participants' understanding on EE has increased, the quality and the sustainable program may be established to encourage the involvement of the OSYs in environment-related activities that will put concepts into practice and for the practicality of the EE program in the community.

Keywords:- Community, Eco Activity, Environment Education (EE), Out-of-School Youth (OSY), Sustainability

I. INTRODUCTION

➤ *Environmental Education and Its History*

In the mid-1970s, a number of environment education (EE) programs which aimed to encourage environmentally-friendly behavior was already conducted. Scholars and experts developed pivotal EE conferences to inspire a more educated and skilled public about the increasing environmental issues and problems that the world is facing today.

The first notable program that left a mark in the environment education sector which was even considered as the first ceremonial attempt to establish fundamental concepts of EE is the Belgrade Charter (1975). A product of the International Environmental Workshop in the United Nations Education, Scientific, and Cultural Organization (UNESCO), this charter offered a goal statement for EE as the conference described and built basic objectives for environmental education. (Athman & Monroe, 2001; cited in Ungre, 2015).

Another significant convention is the Tbilisi Declaration (1977), the world's first intergovernmental conference on environmental education still organized by UNESCO, in cooperation with the U.N. Environment Programme (UNEP). This declaration appeals to all nations to include environmental education in their educational policies; it invites educational authorities to conduct

researches and innovations in regard to environmental education; and urges all members state to collaborate in the field of EE through sharing of experiences, research findings, materials and training facilities available to all teachers and education leaders. Furthermore, the conference supplemented the Belgrade Charter through the drafting of guidelines and principles on EE framework at all levels, both in formal and informal education (United Nations Educational, 1978).

With the established goals, objectives, and guiding principles declared both in the Belgrade Charter and the Tbilisi Declaration, it is no doubt that these conferences became the stepping stones in stressing the significance of EE, which has become a growing discipline since then (Ungre, 2015).

➤ *Environmental Education as a Discipline*

EE is a specialist subject that deals with concepts covering all aspects of the environment. It includes discussion on all living and non-living things, their relationship with each other, and their significant impact on the society (Davis, 2003). Furthermore, EE aims to change and increase the learners' environmental knowledge, attitudes, and behaviors (Pooley & O'Connor, 2000) which are crucial in the conservation of the environment for human development and survival (Rickinson, 2001).

One concept highlighted in EE is the discussion of the seven environmental principles which are a key in understanding society and environment. These are the following:

- Nature knows best;
- All forms of life are important;
- Everything is interconnected to everything else;
- Everything changes;
- Everything must go somewhere;
- Ours is a finite earth; and
- Nature is beautiful and we are the stewards of God's creation.

These fundamental concepts all emphasize how the environment responds to all types of human activities and how humans deserve to live on a planet ("Seven Environmental Principles," n.d.).

In terms of the application of EE in both formal and non-formal education, scholars deem the discipline crucial to ensure that teachers and learners would have a sense of responsibility in terms of protecting the planet from further

destruction. Topics in EE can be a vehicle in developing the critical thinking of the learners and can be integrated in other disciplines like Humanities, Mathematics, and Science courses. According to Campbell, California's superintendent of San Mateo County Schools, EE gives significant opportunities for learners to become involved in real-world issues that go beyond the classroom walls. Campbell added that learners can observe the applicability of their classroom studies to the complicated environmental issues facing the planet, and learners can gain the skills they will need to be innovative problem solvers and powerful environmental advocates ("Why environmental is important," n.d.).

➤ *Global Sustainability Goals*

In the study of environmental education, United Nation's Sustainable Development Goals or SDGs play a vital role especially in transforming our societies towards a sustainable future. "The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity" (United Nations, 2017, para. 1). The SDGs have provided support with nations whose aim is to give the future generation a better and sustainable place to live in. They set guidelines and focus on all nations and countries as far as their own priorities and the environmental challenges of the world are concerned.

The Philippines, in an effort to align its economic and environmental activities as one of the active members of the United Nations, crafted the Philippine Development Plan 2017–2022, 2017 (PDP 2017–2022) through the National Economic and Development Authority (NEDA). The PDP is structured in accordance with the targets of Sustainable Development Goals (SDGs) as evidenced by one of its objectives in *Part 6: Ensuring Ecological Integrity, Clean and Healthy Environment*, which is to resolve, to restore, and to protect the environment and natural resources.

➤ *Philippine Environmental Laws*

Just like any other disciplines in education, EE is deeply anchored in various legal concepts, one of which is Republic Act 9512, otherwise known as the Environmental Awareness and Education Act of 2008. This law encourages inter-agency and multi-sectoral efforts to support the state and mandates "to promote national awareness on the role of natural resources in economic growth, and the importance of environmental conservation and ecological balance towards sustained national development" (Sec. 2, RA 9512). The Act also mandates and supports require the collaboration of principal government agencies such as the Commission on Higher Education (CHED), Department of Education (DepEd), Department of Environment and Natural Resources (DENR), Technical Education and Skills Development Authority (TESDA), Department of Science and Technology (DOST), and non-government agencies in the conduct of seminars, workshops, activities, and other programs alike, which mainly aim to preserve the environment.

Other decrees advocating environmental protection include Presidential Decree (PD) 1586, also known as the Philippine Environmental Impact Statement System; RA 8749, or the Clean Air Act of 1999; RA 9275 (Philippine Water Act of 2004); RA 6969, also known as Philippine Toxic Substances and Hazardous and Nuclear Waste Act; RA 9003, also known as the Philippine Ecological Solid Waste Management Act (PESWMA) of 2000; and RA 9729, also known as the Climate Change Act of 2009.

Despite the abundance of regulations targeted to increase awareness and promote environmental protection, there are only a few Filipinos who are familiar with these mandates. The laws are readily available yet dissemination of information remains poorly executed especially to citizens living in remote barangays. Had these localities been equipped with knowledge on the laws, more and more people might become more involved and proactive in efforts that help preserve. Thus, there is a need to educate the citizens, especially the OSYs, to make them fully aware of the environmental thrust of the country and to give them the opportunity to actively participate in related programs and to disseminate their knowledge gained during the program (CBSI Editorial Staff, 2005).

➤ *Inter-Agency Collaboration on Environmental Education*

Today, the agenda of most countries have shifted on solving environmental problems which exist in the planet. Policies have been conceptualized to answer the global call of protecting the environment (Urey, Colak & Okur, 2009). In recent years, the academe and other environmental groups have conceived EE to develop every individual's consciousness toward the environment.

However, there are still people who are inactive in helping and maintaining the ecological balance. Based on reports on national and international media, the planet is slowly dying (Earth Day, 2015). Half of the world's wet lands have been lost since 1990; nearly 80% of sewage in developing countries is discharged untreated and pollutes rivers, lakes, and coastal areas and even pollutes potable water supply; about 6.7 inches of global sea level rose for the last century; about two million human waste disposed in water bodies; ground water supplies are demising, the earth has warmed since 1980; the Green land and Arctic ice sheets have decreased in mass; irresponsible mining is booming; and deforestations are slowly consuming the human habitat.

When will the citizens of the world act? When will the Filipinos respond to the call of saving the Earth?

To fully realize the global environmental goals, partnership with the public and private sectors, civil society, and citizens alike should be established in order to restore the planet. The key persons who can help pursue the fulfillment of these goals are the OSYs. If mobilized, the OSYs, one of the most productive citizens of the country, can tremendously help in the realization of the PDP. They will be agents of change in their communities and become good citizens in their respective localities. By encouraging them to attend an environment education (EE) program,

which aims to protect the environment and natural resources, achieving a sustainable future becomes easy (STAC, 2013).

In an effort to lead the country on EE, the Department of Environment and Natural Resources (DENR) and the National Network of Normal School (3NS) are collaborating and making initiatives in educating the academe and non-academe citizens on environmental stewardship. Particularly, these drives were born as a result of the damaging effects brought about by calamities not only in the Philippines but also in other parts of the world. For instance, the Super Typhoon Yolanda, also known as Typhoon Haiyan in 2013, left more than 6,000 people dead and caused massive destruction when it battered Philippine Eastern Visayas (“Super Typhoon Yolanda survivors,” 2017). Another calamity that left the Filipinos in agony was the 7.2-magnitude earthquake that hit the central Philippines on October 15, 2013 with at least 93 people reported dead. These, among others, prompted various agencies and institutions to bolster environmental efforts and to further research on EE in the country today.

Although there are a number of studies on EE in other nations that attempt to respond the call of saving the planet, they are only limited in addressing the recent position of the environment topics in textbooks; the recent status in dissimilar levels of schooling; the attitudes, values, and beliefs of the teachers and students toward the environment (Alp et al., 2006; Erol & Gezer, 2006; Rickinson, 2001.); and the comparative environment education of schools (Urey, Colak & Okur, 2009; Davis, 2003). In the Philippines, studies on EE have been conducted in the academe with teachers and students as the participants. However, the researcher on this study failed to find sufficient published evidence on the conduct of EE where the main recipients are the OSYs. Though the country provides non-formal education for the OSYs, only a fraction of the EE topics is included in their curriculum. Thus, this research addresses the OSYs participation on EE, taking advantage of the partnership between Bicol University, the country’s Environment Education Learning Resource Center of the 3NS Project, and the Philippine Normal University Visayas, the Environment and Green Technology Education Hub in the Visayas and an active member of the 3NS Project. Through this initiative, a project on an EE program for the communities was conceptualized. Hence, a project on an EE program for the communities was conceptualized.

II. PURPOSE OF THE RESEARCH

The previously stated insights have made it imperative to conduct this study to determine:

1. The level of awareness and comprehension on seven environmental principles and EE concepts and skills of OSYs before and after the community eco-based activity.

2. The significant difference on the level of awareness and comprehension on seven environmental principles and EE concepts and skills of OSYs before and after the community eco-based activity.
3. The participants’ views of the EE program conducted.

III. FRAMEWORK OF THE STUDY

The framework of this study is based on the theory of social constructivism by Lev Vygotsky (1978, cited in Bonganciso, 2016) and the concept of contextualized learning (cited in Bonganciso, 2016). Social constructivism focuses on human consciousness or awareness and its functions in world affairs. In this concept, the learners are constructors of meaning; they form meaning to what they perceived based on their prior knowledge and experiences (Kukla, 2000). Furthermore, these learners learn better if they are exposed to group dynamics and other techniques that require them to share their experiences with other members of the group (McMahon, 1997).

On the other hand, contextualized learning (Moghaddas, 2013) assumes that learners would best learn different concepts if ideas directly taken from their immediate environment are used. In this type of instruction, learners can absorb information more easily because of the familiarity of the situation and the relevance and parallelism of the lessons in real life, thereby promoting authentic and real-life learning. It involves the experiences of the learners while putting them at the center of the educative process.

Similarly, contextualized learning is used in the study as the foundation of learning in EE because the program was designed to suit the learners’ needs and interests. The students are given the chance to suggest topics and activities that will be included in the EE program, which in the case of the subject OSYs are based on their immediate environment.

The connection of contextualized learning and social constructivism is reinforced with this study’s position. The proponent postulates that OSYs are innovative and they know how to develop novel ideas which they can use in giving meaning to the activities on EE. During the EE program, OSYs are given the chance to work with their peers and discuss things that will make their output meaningful, useful, and helpful; encouraging them to learn through group sharing and field exposure.

The schematic diagram below shows the connection between the variables in the study. The input of the study focuses on the personal profile of the OSYs who were selected based on the pre-identified standard set in the Philippines. Then, the OSYs undergo an EE program that contains various sets of activities not only on EE concepts but also on the seven environmental principles. The OSYs are expected to participate and understand these activities in relation to the concepts of EE.

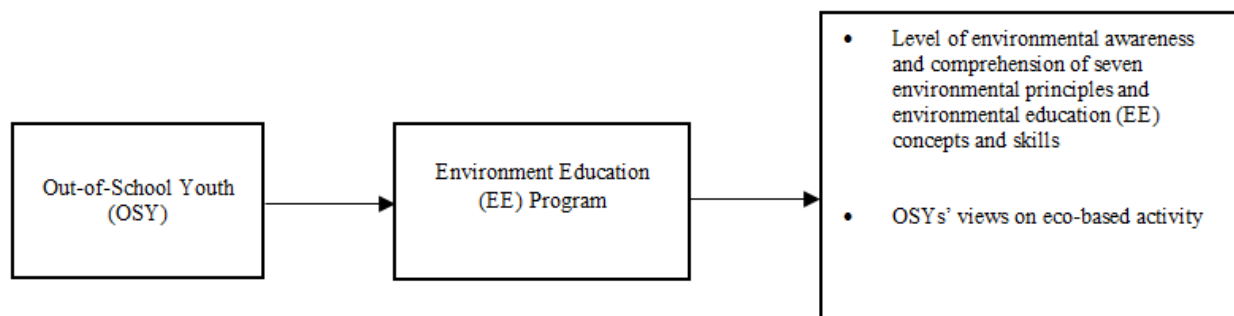


Fig 1:- The Schematic Diagram Shows the Conceptual Framework of the Study

The output of the study explains the learned skills of the OSYs during the conduct of the EE program. It reveals the level of awareness and comprehension of seven environmental principles and EE concepts and skills. Likewise, it shows the views of the OSYs on the eco-based activity and how EE program molds the OSYs and their involvement in the community.

IV. METHODOLOGY

➤ *Research Design*

This study uses exploratory sequential mixed-method design (Creswell, 2014), which starts with the quantitative method—specifically one group pre-test and post-test—and followed by the qualitative approach. The proponent first collected quantitative data that was analyzed to yield a specific result. And then, to explain and support the result

from the said material, the researcher gathered relevant qualitative data.

➤ *Participants and Locale*

This study uses the quota sampling design which is a non-scientific sampling procedure. According to Calmorin and Calmorin (2007), quota sampling design is done by merely looking for individuals who match with the requisite characteristics. In this case, the head of the research locale selected the OSYs based on set of standards provided. There were fifteen (15) respondents consisting of 6 females and 9 males, all between 16 to 22 years old.

This study chose the Philippine Normal University Visayas outreach program locale. This specific site was identified as the most vulnerable because it is located along coastal areas, and it was one of the most devastated places during the onslaught of Super Typhoon Yolanda.

OSY Participant	AGE	Educational Attainment	Father's Educational Attainment	Mother's Educational Attainment	Father's Occupation	Mother's Occupation
A	16	HS	HS	HS	Fisherman	Dishwasher
B	18	HS	Elem	HS	Fisherman	Housewife
C	21	HS	Elem	HS	Security Guard	Sales Lady
D	18	HS	Elem	HS	Fisherman	Dishwasher
E	21	HS	HS	HS	Fisherman	Housewife
F	17	HS	HS	HS	Fisherman	
G	17	HS	HS	Elem	Driver	Housewife
H	20	HS	HS	College	Driver	OFW
I	20	HS	College	HS	Fisherman	Housewife
J	19	HS	HS	HS	Fisherman	Housewife
K	22	HS	HS	College	*	*
L	19	HS	HS	College	*	*
M	17	HS	HS	HS	Businessman	Housewife
N	17	HS	HS	HS	Fisherman	Dishwasher
O	17	HS	HS	HS	Fisherman	Housewife

Table 1:- The Demographic Profile of the Out-of-School Youth Participants

*The respondents did not indicate the occupations of their mothers and fathers.

*HS - High School

Ethical considerations were strictly followed in the conduct of the study. The researcher informed the respondents that their participation in the program was voluntary and that they can refuse to answer questions they are uncomfortable. In addition, they were asked to sign a

consent letter expressing their will to voluntarily take part in the program. Finally, the researcher used pseudonyms to hide the names of the participants and to uphold utmost privacy.

➤ *Instruments*

This study uses three instruments. First is the adopted and modified EE Toolkit, which contains the activities of the program. The toolkit is a community-based eco activity material developed by Barbacena, Laguilles, and a pool of researchers from Bicol University (BU). Permission to use the toolkit was granted through a partnership program entitled “Establishment of BU-DENR Environment Education Learning Resource Center for National Network of Normal Schools.”

The second instrument is a two part-questionnaire for pre-test and post-test. The first part is a self-competency checklist on awareness and understanding of environmental principles. There were fifteen (15) statements related to environmental principles, and the participants have to assess the statement based on their level of awareness. A rating of 4 means they are very well aware, 3 for very aware, 2 for aware, and 1 for not aware. The second part is composed of thirty (30) multiple-choice test items which deal on EE concepts and skills.

The final instrument used is an interview guide which asked for the participants’ views of the EE program. This instrument is intended for a semi-structured interview (Cohen & Crabtree, 2006) during the Focus Group Discussion (Creswell, 2014).

To qualify the aptness of the aforementioned instruments, they were thoroughly scrutinized by three experts in education. For the modified EE Toolkit, said experts evaluated the activities based on their alignment to the identified program objectives as stipulated in the original copy of the EE Toolkit. The instruments used in pre-test and post-test were also validated by the same experts using the Good and Scates Validation Instrument. It rendered a mean of 4.5 which means that the instrument is highly valid. The instrument also was piloted to the OSYs in another area; a score of 0.73 was computed using Cronbach Alpha which means the instrument is reliable.

➤ *Data Collection*

The researcher from PNU Visayas went to the research locale to meet with the head locale (Brgy. Captain of Bngy. Daga, Cadiz City) for the signing of a memorandum of agreement for the conduct of the study. The next day, the researcher held an orientation meeting with the participants. Fifteen (15) participants then took the pre-test. Afterward, the researcher started the first session on environmental activities as indicated in the toolkit. There were ten (10) sessions of this type, averaging from one to two hours per session. The environmental activities were conducted every Saturdays at 3:00 PM to 5:00 PM.

After the ten (10) sessions, the participants took the post-test to check their level of awareness and comprehension of the seven environmental principles and EE concepts and skills. Then the researcher gathered the participants for a semi-structured interview through FGD on their views and learning about the community-based eco-activity program. For ease of discussion, all questions were

translated to *Hiligaynon* dialect, and the researcher instructed the participants to use their mother tongue during the dialogue.

➤ *Data Analysis*

This study uses the mean and standard deviation formula to determine the level of awareness and comprehension of the OSYs before and after the EE program. It utilizes the Wilcoxon Signed-Rank Test to determine the significant difference between the pre-test and post-test results. It also uses thematic analysis to determine the participants’ views on the community-based eco activity program.

V. RESULTS AND DISCUSSION

The present study is an effort to learn about the awareness and comprehension of OSYs regarding environmental education and their role in their community with regards to environmental preservation. As mentioned in the previous section, the researcher selected a sample of fifteen (15) respondents residing in a pre-defined locale in Cadiz City where they were oriented with EE, required to take a pre- and post-test, and interviewed to further collect data for the study. The results obtained were put through statistical analysis through the mean and standard deviation formula.

This section of the study presents the analysis of the result of the pre-test and post-test as well as the thematic analysis on the views of the OSYs on the program conducted.

➤ *Level of Awareness and Comprehension on Seven Environmental Principles of OSYs before and after the Community Eco-based Activity*

The sample for the study was required to take the pre-test before undertaking 10 sessions of the eco-activity program. Table 2 shows that OSYs are well aware (M=2.60, SD=0.311) of the environmental principles before the EE program. At the same time, they are well aware (M=3.45, SD=0.128) of the environmental concepts after the EE program based on the scale provided.

Test	N	Mean	SD
Pre-Test	15	2.60	0.311
Post-Test	15	3.47	0.128

Table 2:- The Level of Environmental Awareness and Understanding of Out-of-School Youths (OSYs) on the Seven Environmental Principles Before and After the Environment Education Program

Scale: 1.00–1.74 Not Aware (I do not know this yet.), 1.75–2.49 Aware (I partly know this.), 2.50–3.24 Very Aware (I know this well.); 3.25–4.00 Very Well Aware (I know and I understand this very well.)

Table 2 indicates that the OSYs are well aware of the environmental principles before the program on environment education was given, but the result of pre-test does not mean that the OSYs have mastered the seven environmental principles.

When the post-test is considered, the researcher discovered that the respondents know and understand the seven environmental principles, which is an indication of the improvement of the OSYs’ awareness of environmental principles after the program.

This result conforms to the participant’s response: *“The program has its relevance in our lives, because through this, we were able to know that we, humans, are the ones who are destroying our environment, and the destruction we made to our environment will get back to us. And now, we have to do something to take good care of the environment.”*

The result of the present study is supported by the study of Ungrerer (2015) and Choudary (2010), when they conducted a case study on the attitude of participants of EE programs in the academe. This program emphasized on promoting water and energy conservation, underlining the relations between the two. Ungrerer’s study found out that there is an increase of knowledge and behavior after the programs were conducted; however, his study only focused on a single program entitled Drops and Watts. Thus, it is noted that the participants of the present study have increased their knowledge and attitudes after the program.

➤ *Difference in the Environmental Awareness of the OSYs Before and After the EE Program*

Table 3, shows the significant increase from pretest ($Mdn = 2.25$) to posttest ($Mdn = 3.40$) in level of awareness and comprehension of the OSYs, $Z = -3.408$, $p < .001$, and the increase is large ($r = -.62$) based on the Wilcoxon Signed-rank test. This means that the EE program positively affects the OSYs’ levels of awareness and understanding of seven environmental principles.

	Posttest – Pretest
Z	-3.408
Asymp. Sig. (2-tailed)	.001

Table 3:- Significant Difference in the Environmental Awareness on the Seven Environmental Principles of the Out-of-School Youths (OSYs) Before and After the Environment Education (EE) Program
P < .05 Significant at .05 alpha

One of the participants said, *“This program has changed my perception toward our environment. One of the changes I will do is to take good care of the gifts from God so that it will not be destroyed and can still be used by the future generation.”*

The result of this study is supported by the study of Haryono, Soemarno, Djati, and Setyoleksono (2014) when they conducted a study on the environmental attitudes of the participants. They found out that there is a change in the behavior of the participants when EE was conducted. Hence, the present study proved that EE programs can improve the participants’ environmental behavior.

➤ *Level of Awareness and Comprehension on Environmental Education (EE) Concepts and Skills of Out-of-School Youths Before and After the EE Program*

As shown in Table 4, the level of awareness and comprehension EE concepts and skills of the OSYs before the introduction of the program is high ($M=12.67$, $SD=1.589$), and very high ($M=23.13$, $SD=2.356$) after the program. This means that there is an increase in the level of awareness and understanding of the EE concepts and skills on the OSYs after the program was conducted.

Test	N	Mean	SD
Pre-Test	15	12.67	1.589
Post-Test	15	23.13	2.356

Table 4:- Level of Awareness and Comprehension on Environmental Education (EE) Concepts and Skills of Out-of-School Youths Before and After the EE Program
Scale: 1.00–6.79 Very Low; 6.80–12.59 Low; 12.60–18.39 High; 18.40–24.19 Very High; 24.20–30.00 Very, Very high

The increase of competence of the OSYs might be attributed to their positive attitude toward the program (Haryono, Soemarno, Djati, and Setyoleksono, 2014), as their responses to the interview revealed this: *“I learned how to recycle plastics and other things that are still useful. I also learned how to make the MRF so that our trash, which is still useful, will be disposed of properly and not litter everywhere. I also learned how to plant and make a garden using organic fertilizers.”*

Moreover, the result might also be attributed to the difficulty index of the lesson, since it deals only on the basics of recycling and discussions on environmental laws and the seven environmental principles.

➤ *Difference in the Level of Awareness on Environment Education (EE) Concepts and Skills of the Out-of-School Youths Before and After the Environment Education Program*

Table 5 shows that there is a significant increase from pre-test ($Mdn = 12$) to post-test ($Mdn = 21$) on environmental awareness and understanding of OSYs in terms of EE concepts and skills, $Z = -3.418$, $p < .001$, and the increase is large ($r = -.62$). This means that the OSYs’ environmental competence in EE concepts and skills has improved significantly after the program.

	Posttest - Pretest
Z	-3.418
Asymp. Sig. (2-tailed)	.001

Table 5. Significant Difference in the Level of Awareness on Environment Education (EE) Concepts and Skills of the Out-of-School Youths Before and After the Environment Education Program
P < .05 Significant at .05 alpha

However, the remarkable increase does not mean that the OSYs are fully aware on EE concepts and skills, but the result can be attributed to the delivery of the program. When an OSY was asked about the strength of the program, the participant said, *“The program gave us an education. The concepts on the environment that we need to learn were thoroughly discussed.”*

This study is supported by the statement made by Hungerford and Volk (2013) and Erhabor, & Don (2016) that the main focus of EE program is to change environmental behavior through increasing knowledge about the environment.

➤ *Views of the OSYs on the Community Eco-Based Program*

The Focus Group Discussion yielded two themes that are relevant to this study. These are the “Eco-Based Community Activity: Values and Attitude Formation Activity” and the “Eco-Based Community Activity: Its Relevance and Application to the Life of the OSY”.

➤ *Eco-Based Community Activity: Values and Attitude Formation Activity*

The attitude and values of the OSYs toward the protection of the environment have significantly changed after the conduct of the community eco-based activity. The program has inspired the participants to take good care of the environment, follow the principles of the environment, and respond to the call of protecting the Earth from destruction.

Although others usually tag OSYs as persons who are unproductively bystanding along the streets and alleys, their lifestyle can change if given programs that guarantee their involvement. With the eco-based EE program, for instance, this group can become valuable and material in the community’s efforts of protecting the environment.

Most of the respondent OSYs agreed that the program has changed their values and attitudes. The following statements from the participants can attest to this:

Participant D: *“Naliwat ang akon panan-aw sa palibot ko paagi sini nga programa sa paagi nga ako subong kabalo na nga may ara gali kita kalabutan sa aton palibot. Kag kinanglan gali nga aton buligan ini nga palibot para sa sa aton mga sumunod nga mga kabataan.”* (Because of this program, my perspective towards my surroundings has changed. I have learned that we have a big role in our environment, that we need to help each other to take good care of our environment for our future generation.)

Participant F: *“Ang ini nga programa naga liwat guid ang akon panulokan sa aton palibot. Isa na sini ang pag tatap sa mga tuga sa aton sa Dios, nga kinanglan guid gali nga aton tatapon pag ayo para indi ini maguba kag magin mapuslan pa ini sa sumunod nga mga henerasyon.”* (This program has changed my views about the environment. We need to take good care of God’s given creation from further

distraction so that this will still be useful for the next generation.)

Participants D and F pointed out that the program has changed their perception toward the environment. They realized that they are part of the ecology and that they have obligations and responsibilities to preserve the Earth for future generations.

Participant A: *“Akon ini pagahimoon sa amon barangay kag tudloan ko man ang mga kabataan sini sang akon nabal-an.”* (I will apply what I have learned from this program, and I will teach also other OSY about this.)

Participant C: *“Ang akon recommend nga tani, magapadayun ini nga programa. Nga tani, kami nga mga out-of-school youths magahimu sang grupo para sa pag tatap sa aton palibot.”* (I hope this program will continue, and that we, the OSY can create a group who can take good care of our environment.)

Participant E: *“Nga intrahon man ang amon pamilya sa sini nga programa.”* (That our whole family can also be part of this program.)

Participant A has clearly been inspired by the program as he promised to share to others what he has learned in the program. Participant C hopes that this program will be continued to create a group of OSYs who will be stewards of the environment. As for Participant E, he hopes that even their families can take part in the program as well.

It can be gleaned that the program has certainly imparted positive values and attitudes to the OSYs. Concern for the environment and the sense of responsibility to preserve the Earth for the next generation are among the positive values that the respondents displayed.

➤ *Eco-Based Community Activity: Its Relevance and Application to the Life of the OSYs*

This study introduced various realistic activities that the OSYs can make use of in order to boost their involvement in the protection of the environment. Relevant In this case, the OSYs, as the participants of the study, viewed eco-based community activities as significant in their lives.

Participant A: *“Maayo guid ni nga programa, sir, kay nakabalo kami sa mga layi sa environment. Kag nakabalo man kami ano amon buhaton sa amon mga palibot.”* (This program is good because through this program we are educated on the different laws pertaining to the protection of the environment. Likewise, we learned what are the ways to preserve our environment.)

Participant C: *“Ang programa nga ini, sir, nagabugtaw sa amon nga kami maga giho guid sa amon lugar sa pagprotekta sa amon palibot. Kay daw indi pa man ulihi ang tanan. Mabuligan pa ni naton ya ang aton palibot.”* (This program has awaken us up that we need to protect our

environment. It is not yet to late, we can still help protect our environment.)

Participants A and C pointed out that the program has introduced them to the fundamental laws on the environment which provided them with better appreciation of the relationship of regulations and the compliance of the society to the laws to the effective preservation of their immediate environment.

Participant C: *“Maapply ni namon sa amon kabuhi sa paagi nga kami magahimu sang amon nga nabal-an di sa programa nga ini. Pareho sang pag recycle, paggamit compost para sa pagpatubo sa amon tanom, pag paninlo sa amon lugar kag pagtudlo sa iban sng nabal-an namon di.”* (What we have learned in this program can be applied in our lives. Doing recycling, using compost as fertilizer, cleaning our place, and teaching other people about what we have learned here.)

Participant E: *“Ang pag tanum sang kahoy, sir, kag pagamit sng mga compost sapagpananum.”* (Planting trees and using compost as fertilizer.)

Participants C and E explicate that the activities introduced in the program such as recycling, composting, and planting of trees can easily be applied in their daily lives. Because of the OSYs’ facilitator’s mode of instruction and approach in teaching, it can be concluded that the eco-based activity included in the program has proven to be effective in influencing the attitude of the participants towards environmental efforts.

VI. CONCLUSION

This study found that that educating the youth about environmental preservation will positively change their attitude and mindset toward the protection of the environment. With the introduction of various eco-based activities and the orientation of relevant environmental laws and ethical practices, OSYs can become catalysts of change. The results of this study clearly indicated that the level of awareness and comprehension of OSYs on the seven environmental principles and EE concepts and skills has greatly increased after undertaking the EE program. Therefore, direct instruction about the environment is necessary. More EE projects should be introduced and monitored so that the youth can learn how to set goals and projects in terms of ecological preservation.

This study posits that the EE concepts are a better topic for OSY non-formal education and a significant inclusion in Alternative Learning System (ALS) of the Department of Education (DepEd). Similarly, EE can also be integrated into the higher education curriculum to develop a high environmental awareness of the learners, who will eventually take the lead and solve the problems of the planet.

The study suggests that while the OSYs have prior knowledge about environmental concepts, environmental

practices, and its effect on the environment, it is through the EE program that their consciousness on different environmental practices and its effect on the environment has greatly improved.

Results proved that although the participants were OSYs, they possess knowledge of seven environmental principles and EE concepts and skills. The program had increased the understanding and competence of the participants, making them more aware of their roles in preserving the environment. They have become even more sensitive of the relationship and connectedness between human and environment. This awareness and comprehension are helpful in making the OSYs more mindful of their practices, and at the same time, become more empowered to influence other members of their communities to become stewards of the Earth.

The EE program enabled the participants to learn and improve what they had already learned. They became open to developing different skills to equip them in helping preserve and protect the environment. They expressed their interests in acquiring competence in recycling and composting and other useful environmental activities.

The program has been successful in creating environmental awareness and sense of responsibility among the participants. It educated the respondents about the dos and don’ts in preserving the environment and the existence of environmental laws that regulate and protect the environment from exploitation. Being enrolled in the program, the OSYs’ minds were opened even to the most complex concepts of ecological preservation, along with the issues that come with it. The OSYs are expected to share their knowledge of program to the community.

Lastly, the data provides valuable information that would help the government and other concerned organizations in promoting and strengthening the campaign for protecting and preserving the environment with OSYs as the lead agents.

RECOMMENDATIONS

Although the study on EE programs for OSYs was successful, there are other factors that this research needs to explore further. This program ran only for ten (10) days with a maximum of two hours per session. There were only fifteen (15) participants who belong to one *purok* only. Thus, the researcher encourages for an extended learning session to be conducted as well as a follow-up evaluative study on the effects of the program to the larger community.

The EE program is limited only to the discussions of the environmental principles, the Philippine environmental laws, and some environmental conservation practices, such as recycling, planting, and establishing of materials recovery facility (MRF). Hence, another program that focuses on topics beyond recycling, planting, and establishing of MRF is recommended.

Furthermore, the existing program only focused on the awareness and understanding of the participants on environmental principles and EE concepts. This suggests that the evaluation and observation of the OSYs' environment-friendly behavior should also be considered to further the study. Likewise, a sustainable program should be established to encourage the involvement of the OSYs in environment-related activities. The delivery of the lessons and activities should also be considered.

Lastly, it must be noted that the program was conducted solely for research purposes only; hence, the inclusion of EE concepts in an alternative learning system or non-formal education is encouraged.

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