

# Exploring the best practices of the Youth for Environment in Schools – Organization (YES-O)

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**Abstract:** Increasing community awareness and knowledge about environmental problems is the primary goal of environmental education. This study explores the best practices of the Youth for Environment in Schools-Organization (YES-O) in selected schools in the National Capital Region, Philippines. A qualitative study involving interviews and focus group discussions directed the collection and analysis of data. The study discovered that the implementation of the YES-O program was successful due to the following best practices: (a) personal advocacy, (b) resource availability, (c) flexibility, (d) integrated school efforts, (e) participatory approach, and (f) monitoring and evaluation strategies, which were all supported by the emerging themes. Meanwhile, capacity building and strong networks emerged as important themes supporting the YES-O program implementation in secondary schools. The schools can continue their practices to sustain the implementation of the program. However, schools should take into account certain indicators that require improvement to enhance their performance. These may include strengthening their networking, linkages, and partnership strategies to better engage and synergize environmental education given the mandated programs, projects, and activities of the YES-O program implementation.

**Keywords:** best practices; environmental education; Youth for Environment in Schools - Organization

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## Introduction

Issues concerning environmental sustainability are now one of the research goals in the Philippines and abroad. With the emergence of environmental technologies, research initiatives by educational institutions and collaborations among stakeholders to provide evidence-based decisions have become increasingly relevant (Ardoin et al., 2020; Cadiz et al., 2018; Mohammed, 2018; Tal & Peled, 2017; Waititu, 2021). According to Clare et al. (2012), sustainability programs focused on environmental education in public elementary and secondary schools have been implemented to a moderate extent. Numerous reports have been written on environmental sustainability, but few have approached the topic specifically from an outlook that strengthens institutions. Additionally, human participation is still lacking in many sustainability initiatives. Numerous educators have tried to strive to improve both the environment and the field of education and most of them agreed that it is important to integrate environmental education into the learning process for students (Ali et al., 2017; Ardoin et al., 2018, 2020; Runhaar et al., 2019). However, the study conducted by Wanchana et al. (2020) revealed that environmental education is still at an inadequate level in terms of curriculum presence, consistency, depth, and impact.

The establishment of YES-O in 2003 as a school-based curricular organization is a significant venue for students' actions and movement toward safeguarding, protecting, and conserving the environment for future generations. In Philippine public schools, the only accredited club organization that is mandated to promote environmental education in schools is YES-O. It is also the premiere student organization in

the Philippines concerned with environmental welfare. This organization consolidates all other environment-related clubs in schools and is separated from the Science Club, which primarily focuses on science and technology (DepEd Order No. 72, s. 2003).

Existing environmental education programs have positive outcomes for learners in terms of environmental knowledge, attitudes, dispositions, and skills across various settings and configurations. (Amran et al., 2019; Ardoin et al., 2018, 2020; Bergman, 2016). However, research findings suggest that unclear and inadequate teaching methods hinder the development of students' environmental consciousness in line with the curriculum's target (Pantongkam et al., 2018). Although, the teachers were focused on teaching specific EE content, however, it has been observed that there was little connection with other topics they taught (Tal & Peled, 2017). Moreover, the learning process does not explicitly reflect the development of an environmental consciousness. The learning step focuses on only content too much and lacks integration of the community context or places to be a part of learning and students are not engaged in solving problems. Students often lack awareness of environmental issues in their community as well as their role in solving these problems (Ali et al., 2017; Aliman et al., 2019; Bergman, 2016). Moreover, studies also revealed that secondary school students have low to moderate levels of understanding of environmental issues, knowledge and attitude, and environmental awareness levels (Ali et al., 2017). It can inhibit the students' critical thinking skills and awareness of the environment since critical thinking skills can be observed in the environmental attitude (Amran et al., 2019; Misiaszek, 2020; Sasson et al., 2018). It can be surmised that more emphasis should be given to Environmental Education inside as well as outside the classroom. Janmaimool (2017) also stated that though people have the capability, good attitude, and active intention, they may be reluctant to act environmentally because of a lack of motivation. The Right to a Healthy Environment of the Philippine Environment Policy clearly articulated that the Government recognizes the right of the people to a healthful environment. Moreover, it shall be the duty and responsibility of everyone to contribute to the preservation and enhancement of the Philippine environment (Presidential Decree No. 1151, Sec. 3). The Philippines is performing poorly in terms of its Environmental Performance Index in 2015, compared to other countries. The country is ranked 114th out of 178 countries, based on how well it addresses significant environmental issues such as the protection of human health from environmental hazards and ecosystem protection.

Teachers are the implementers of the curriculum on environmental education in the school. They are also the facilitators of many activities related to environmental education in the school to promote environmental awareness and environmental knowledge for the students. They act as agents of change in the students' beliefs, attitudes, and values towards environmental education. However, teachers may also hinder the achievement of the goal of environmental education in the school due to a lack of skills and knowledge in implementing the curriculum as well as in the implementation of various programs on environmental education. Evidence suggests that teachers lack relevant information on the current situation of the environment and possess a low understanding and skills in environmental education along with the knowledge of resources for the promotion of environmental education to learners (Salóte et al., 2016; Wanchana et al., 2020). Other issues and concerns were identified in the study by Perez, (2019) like weak monitoring and evaluation, time constraints in the conduct of activities, lack of funds for training, and uncoordinated and overlapping projects by different youth organizations. Teachers also must be seriously committed to implementing the environmental education curriculum, wherein according to Karpudewan et al. (2015) knowledge and attitude towards specific environmental concerns may be improved using student-appropriate instructional strategies. There should be a thorough approach to measuring the environmental awareness of an individual to have a clear articulation of a deeper understanding of the cognitive, affective, and conative components of having such strong environmental awareness (Ham et al., 2016).

The school together with the teachers must not only focus on learning and practicing the concepts and theories within the school community but it is necessary to reorganize the curriculum to be able to integrate environmental education into the learning process to make it more realizable for the community (Labog, 2017; Sukma et al., 2020). Strengthening the established linkage to other agencies is also a vital part of the equation to achieve sustainability. Extending sustainable practices is a collaborative effort of the students, schools, outside communities, LGUs, and other related government and non-government agencies. Such interaction can improve the quality and coverage of sustainable practices not only in school but in the whole community. Iftekhhar and Marasigan (2019) highly suggests in her study that collaboration within and between national and local stakeholders is necessary as the most appropriate approach to learning environmental pedagogies wherein these stakeholders take charge of environment-related activities could help them understand how economy, culture, and politics are linked to education for environment sustainability. Community leaders should set a good example, while teachers and school administrators should provide opportunities for environmental activities and lead capacity-building programs for the learners.

Based on the statements, it is hoped that this study will enable the DepEd officials, school administrators, students, teachers, parents, and other stakeholders in the community to become more responsive to the current needs of the changing society. This study believes that the sustained practices of YES-O should

involve a systemic approach, encompassing both internal and external stakeholders of the schools. The schools can strengthen environmental education by implementing feasible activities that raise awareness and encourage action within the schools and community. These practices can help achieve YES-O objectives mandated by DepEd and ensure timely, relevant environmental education programs. This study attempts to develop an organizational sustainability model that could support and sustain the successful implementation of the YES-O programs.

## Method

The study utilized a qualitative research design employing semi-structured interviews and focus group discussions. This was done to collect responses from the key informants or focal persons, who were the 18 student officers, four facilitators/teacher-advisers, and three school principals, who were selected purposively, relative to the implementation of the YES-O program in three schools in the school's division of Manila, Marikina, and Quezon City in National Capital Region, Philippines. The purposive sampling technique aims to select respondents likely to provide relevant and valuable information. Moreover, this non-probability sampling technique was used to better match the sample to the aims and objectives of the research, thus improving the rigor of the study and the trustworthiness of the data and results (Campbell et al., 2020).

The key informants of each participating school were asked about their practices of the YES-O programs in the aspect of the DepEd-mandated provisions. The interview focused on implementing the YES-O program through curriculum integration, advocacy, networking & partnerships, funding sources, planning of activities, stakeholder engagement, and monitoring & evaluation. The researcher facilitated the semi-structured interview using open-ended questions on the practices of the YES-O program implementation in their respective schools. The participants were allowed open share and answer the questions during the online sessions. The interview session lasted for 75 to 90 minutes while the FGD was done for about 45 to 60 minutes per session. The sessions were recorded using Google Meet conferencing.

The qualitative data analysis utilized responses from interviews and FGDs. The whole process of initial to selective coding used the verbatim transcript based on the transcribed responses from the recorded interviews and focus discussions. The statements in Filipino were translated to English during data analysis. The responses of the participants in the open-ended questions in the survey questionnaires were in English, thus, translation was not needed anymore. Moreover, the results of the qualitative data from the open-ended survey questionnaires were used to support the interpretation of the data to answer the first research question. The analysis of the qualitative data was performed using a QDA Miner Software Package for content analysis through coding of the transcribed data. The software offers the ability to code and retrieve text and store files in an internal database (LaPan, 2013). In this study, the steps in conducting thematic analysis as a qualitative data analysis method from the research of Lester et al. (2020) were adopted. Moreover, thematic analysis was used to generate broad descriptive statements that reflect the overall understanding of the data in response to research questions.

## Results and Discussion

The data were gathered from the semi-structured interviews and FGDs from the participating eight junior high schools in the NCR. Analysis of successful YES-O program implementation revealed 22 best practices and 2 supporting opportunities. The codes were categorized into four groups during the second round of coding. The last round of coding yielded six themes. Table 1 presents the summary of major themes and sub-themes.

### Personal Advocacy

The theme that emerged in this study is the strong personal commitment of the participants to support the environmental actions and policies mandated by DepEd relative to the existing objectives and the PPAs of the YES-O program implementation. The participants have expressed a personal strong commitment to environmental advocacy. The study's findings align with Wodika and Middleton (2020) research, indicating that students prioritize communication of their pro-environment views, particularly in the context of climate change education. The student officers take the initiative to encourage their schoolmates to join the organization. They feel so motivated to advocate the importance of environmental conservation and protection. One student officer shared:

*"... invite their classmates to join the organization so that as a growing community, we can address any environmental issue we may encounter, initiate my schoolmates to participate in the activities of the YES-O."*

The participant also added that:

“... we should give back to our environment by caring for it, being aware of it, and strengthening our capabilities to be an EcoWarrior by joining YES-O.”

The students are highly committed to advocating and sharing the activities of YES-O with their schoolmates and the other youth in the community. This kind of practice is making it easier to construct environmental communication and social learning metrics that go hand in hand (Waititu, 2021). Likewise, not all students are able to apply their knowledge about environmental awareness, even though they are aware of its importance (Amran et al., 2019).

Table 1. Summary of Major Themes and Sub-themes

Themes	Sub-themes
Personal advocacy	Advocacy
Resource availability	Budget allocation
	Fund sources
	Partnership with stakeholders
Flexibility	Maximize online platform
Integrated school efforts	Curriculum integration
	Alignment on DepEd VMGO
	Alignment with school activities
	Collaboration with existing school programs
	Collaboration with other school organizations
	Integrated school programs
	Guided planning
	School policy support
	School support
	Supportive school leadership
	Communicates programs with stakeholders
Participatory	Collaborative work
	Participatory
	Encourage Membership
Monitoring and evaluation	Monitoring and evaluation
	Recognition
	Transparency
*Opportunities	**Capacity building
	**Strong networks and linkages

Another advocacy that is an example of showing support for environmental actions in school is leadership. Based on the interviews, one principal shared:

*“I am proud to say that I am an Environmentalist. For example, whenever I buy a banana cue, I don’t throw the stick in the trash. Instead, I will think of ways on how I can still reuse it. I even do the same thing to plastics of candies. Ever since my childhood, I can’t remember any instances where I scattered garbage in the corridor. Since I also grew up on the farm, I got accustomed to agriculture and being environmental. Up to this moment, I still do the same. I even noted that if we have great leadership, our regular actions will contribute to who we are.”*

This implies showing a concern for the environment by advocating and being able to translate what you know into practice. Personal advocacy should be demonstrated through actions and behavior, not just communicated to others. More individuals are utilizing a variety of methods to protect and preserve the environment, including both traditional and innovative approaches. For example, the youth have already started encouraging their friends to discuss, debate, and push for better environmental protection on social media and other online interactions. Moreover, the youth can have an increasing agency and nurture them by involving them in community engagement such as in environmental advocacies (Cardarelli et al., 2019, 2021). Participating in citizen science and stewardship activities can increase environmental advocacy and volunteerism (Derrien et al., 2020; Garzón-Díaz, 2021; Hahn et al., 2020; Johnston et al., 2020; Merenlender et al., 2016; Olsen et al., 2020).

## Resources Availability

The implementation of well-planned PPAs of the YES-O in schools requires sufficient material and financial resources. The successful execution of the YES-O PPAs will require both internal and external support mechanisms. The participants emphasized the importance of the availability of resources (financial and material) in the implementation of the YES-O program. While some schools allocate a budget for the activity, others rely on donations, membership fees, and fundraising.

The first sub-theme is the budget allocation. This pertains to the school's intention to fund or the actual allocation of funds for the YES-O PPAs. As stated in Enclosure No. 1 to DepEd Order No. 072, s. 2003

regarding the constitution and by-laws of the Youth for Environment in Schools-Organization (YES-O), it is stated in article XVI, section 1 that there are two sources of funds for the YES-O. First, the General funds consist of the membership fee while Special Funds shall come from donations, sponsorship, fund-raising projects, or any amount derived from legitimate sources. As part of the basic education services, the school may prioritize areas to address identified issues and concerns with the leadership of its principal. Since the school is mandated to craft its 3-year Enhanced School Improvement Plan, various activities were included as priorities included in the PPAs to continue the services of the school to its teaching force, non-teaching staff, and students. Given the YES-O program implementation in the school, the organization plays a big role in addressing the concerns of the school in terms of waste management and ensuring the health and safety of the teachers and learners, among others. Hence, the school allots a certain amount for the PPAs of the YES-O which is stated as part of their approved Annual Implementation Plan (AIP). One school principal shared:

*“... when the school crafted the SIP or the School Improvement Plan, we included their programs. So, if ever their programs are included in the SIP, each program of the organization like the YES-O, will be allotted a budget, and that will become the source of funding.”*

The YES-O of the school partnered with the other school program to achieve the target objectives. Another school principal (P1) mentioned:

*“... YES-O and ‘School Vegetable Garden’- are almost the partner, they are incorporated and connected. This project is already included in our Annual Implementation Plan (AIP), we allot a budget or funding of around thirty thousand a year for this program.”*

The YES-O program gains the support of the school principal because it is mandated by the DepEd policies and guidelines. Another school principal (P2) reiterated:

*“We allot a budget of around thirty to forty thousand a year for these programs, we recently procured the gardening tools including the crops, seeds, and fertilizers. It is there already. I also keep on asking and telling our project in charge not only for the YES-O to tell us if there’s a need for them to receive funds since we often revise the funding plans because it is included in the program, and I know that in DepEd we need to support this program.”*

The second sub-theme under resource availability is the fund sources. This involves all initiatives taken to raise funds for activities, including financial donations, membership fees, and fund-raising activities. Since the school depends on the provision of Maintenance and Other Operating Expenses (MOOE) which are the allocated funds for public secondary schools that can be spent on activities and necessities such as electricity and water that support learning programs and help maintain a safe and healthy environment in schools, there are instances that less amount of budget is being allocated to the YES-O. The school had to find alternative ways to support YES-O’s mandated PPAs. The facilitators and teacher-advisers led fundraising efforts, backed by the school principal. This could include financial donations, membership fees, and other fundraising activities. One participant shared:

*“As a way to overcome this, we conducted a donation drive and sold recyclable materials to junk shops as some of the ways to accumulate funds.”*

The YES-O initiated fund-raising activities to accumulate funds. One facilitator/teacher-adviser (F/T-A3) narrated:

*“For the recyclables, we were able to do that before. We were able to recycle tin cans together with my previous officers. That is the trend because there have been a lot of tin cans before. But now, we can only recycle plastic and bottles and white paper.”*

As to the membership fee as one of the alternatives in raising funds for the YES-O, one facilitator/teacher-adviser (F/T-A1) shared:

*“... part of the membership is to recycle, and this becomes our source of funds. To become a part of the organization, each student must get an ID, so the students issue and print their I.D., especially those with printers at home, to reduce the spending of the organization.”*

There was also an instance where the student officers contributed a certain amount of money to be able to conduct the activity due to unforeseen circumstances. During the FGD, a student officer revealed:

*“...we also have modifications from time to time with our programs since it will be ignored if it will not be continued. But the modifications that we made that time (before) is we contributed and raised our funds just to continue that certain activity.”*

The third sub-theme for resource availability is the partnership with stakeholders. This is also among the most common solutions to address the need for materials and finances for the implementation of the PPAs of the YES-O. The value of partnership within and outside the schools is still one of the functional support mechanisms to gain resources that are intended to be used to sustain the PPAs of the YES-O in the school. Based on the interview, a facilitator/teacher-adviser (F/T-A1) shared:

*“During our seminar for the students, we were able to get sponsors who discussed and gave activities about Zero Waste. We also have a tie-up partnership with STIFI which also has a partnership with the division office. We also have Maynilad as our partner and the one that we call the ‘Manila Bay Sunset Partnership Program’ which included a partnership with MAYNILAD, DepEd, Landbank, and other partners from the academe.”*

Another activity conducted by YES-O is with the DENR. One of the mandated PPAs is the seed bank and nursery establishment and plating, caring, and growing of trees. As a strategy, the school requested seedlings from the DENR. One facilitator/teacher-adviser (F/T-A3) shared:

*"During my time, what I know is that until now we still have a wide garden where we can plant. We also conducted a tree planting activity, but we only did it in the school surroundings. We also planted seedlings and plants that we got from the DENR."*

Another facilitator/teacher-adviser (F/T-A2) added during the FGD:

*"Because we got seedlings from the DENR, what happened is that we were not able to find a location to plant the seeds that were given to us. But since the school vicinity is wide and it is near the river, we planted the seeds in the school vicinity."*

As to the outreach programs such as the clean-up drive, the YES-O of the school also partnered with private industry and local government units. During the FGD, the facilitator/teacher-adviser (F/T-A3) mentioned:

*"We had a partnership with Manila Water during our clean-up drive. What I know is that we were able to get donations such as cleaning materials that the students will use from the City Environment Management Office of Marikina."*

Based on the interview, a school principal (P3) also shared:

*"Our organization has more projects that we can still have a partnership with the LGU when it comes to the collection of solid waste."*

The schools have partnered also with the NGOs as a support mechanism to conduct the PPAs of the YES-O. Based on the interview, one facilitator/teacher-adviser (F/T-A1) shared:

*"We have partnerships and tie-ups with NGO and private organizations when it comes to environmental activities like MYLE-Manila Youth Leaders for the Environment"*

Based on the interview also, one school principal (F/T-A1) mentioned:

*"Another set of donations we received is from Rotary. And I can say that we have strong partnerships with different organizations and that's one of the achievements of the YES-O and School Vegetable Garden."*

Another notable sharing from the participants during the interview is about the challenges experienced by learners in this time of pandemic wherein through partnership of the YES-O and NGO, it provides support to learners in terms of gadgets for distance learning. One school principal shared:

*"Actually, there are no tablets available for the students so we were able to distribute from the start of the school year the 100 tablets for the students and they are still promising motivations given to the teachers that probably the next time this 2022 there will be laptops for the teachers if we keep giving them plastic bottles. In exchange for that this is a doing that we could minimize the plastic bottles that may go into our bodies of water."*

## Flexibility

Another emerging theme that describes the best practices of the YES-O program implementation in the context of junior high school is flexibility. Being flexible is necessary to deliver the target PPAs to the beneficiary despite the challenges and difficulties that the organization experienced. The participants experienced limitations in the implementation of their PPAs. The YES-O applies the rule of thumb when it comes to providing contingency plans to have alternative ways in case of unexpected situations that might arise. The YES-O modified their time plans with the help of their school principal. One facilitator/teacher-adviser shared:

*"In our YES-O club we only prepare the activities that we could do, we're practical in our action plan that is why we only focused on spreading awareness as we don't have any resources available during that time."*

A student officer during the FGD also added:

*"As the president of our YES-O club, I had to be resourceful, creative, and be a good leader to manage our club; it's quite difficult to get resources and to implement the activities."*

Based on the interview, one facilitator/teacher-adviser shared:

*"Major adjustments would probably be the monthly coastal clean-up designed by our school, together with our YES-O adviser and co-adviser. In the original plan for the activities and programs of the YES-O, the only clean-up drive that is included in the plan."*

The sub-theme that emerged as part of the flexibility is maximizing the use of online platforms. Aside from being posted on the YES-O bulletin board, the organization also promotes the PPAs through social media. Since the school has its official Facebook Page, the YES-O of the school has a separate official Facebook Page managed by the facilitator/teacher-adviser and student officers to reach out to the learners, teachers, and people of the community about the PPAs of the YES-O. During the FGD, one student officer shared:

*"We have a Facebook page where we share updates and important reminders"*

Another student officer commented during the FGD:

*"... by creating social media pages and by spreading and reaching out to students digitally."*

This result conforms with the findings in this study on the environmental skills of the students which they can use social media platforms such as Facebook and Twitter to spread posts for environmental awareness. According to [Buchanan et al. \(2019\)](#), the use of digital technologies can enhance the students' engagement in various sustainability initiatives as well as in sharing their advocacies with others focusing on conserving, protecting, and managing the environment.

Due to the pandemic, YES-O has faced several challenges and difficulties in managing and delivering the PPAs. The learners are at their homes and the only modality that they can be able to conduct the modified and possible activities in this time of pandemic is online. Therefore, the YES-O official Facebook page has been expanded to engage learners and community members effectively. During the interview, one school principal (P1) mentioned:

*"... we had a pandemic right now, as much as they want to come to school, we do not allow them so if ever there will be activities it should be online. Since the virtual platform is the only means in fact when they come up somewhat like a video wherein, they play it in our Facebook Account that is one way we can make other stakeholders aware that there is such a club, and this club is trying to help."*

Based on the interview, one facilitator/teacher-adviser (F/T-A1) shared:

*"... there were a lot of Facebook live sessions which can help the students and parents to understand more leadership, effort, and resourcefulness, raising awareness because we lack funding, raise environmental awareness through our Facebook page about the current environmental issues."*

According to [Paredes-Chi and Viga-de Alva \(2020\)](#), teachers commonly use discussions as a teaching strategy to promote environmental awareness and provide related information. Teachers now use Facebook groups as a learning management system to facilitate discussions in the era of social media. The PPAs of the YES-O were modified by the school to become suitable to their context. Based on the interview, a school principal (P2) shared:

*"We don't spend money on webinars, we also don't spend money in terms of the plants and seedlings that we use for our activities. We don't get funding from MOOE, so it's not a part of it. But since we have partnerships, we do not need cash. Instead, we need materials that we could use for our invited speakers, in terms of the materials, and terms of their services."*

## Integrated School Efforts

Another theme that emerged in this study which focuses on the best practices of the YES-O program implementation is the integrated school efforts. This theme shows that there were multiple demands on the participants (academics, other programs, and activities). These demands are vying for time and resources (human, material, and financial). However, schools that have integrated efforts have better chances of involving students. For instance, in the school from SDO Marikina, it is noticeable how the YES-O works with "*Gulayan sa Paaralan*", which product eventually supports the school's feeding program.

The first sub-theme is curriculum integration. This shows that the principles of the Youth for the Environment in Schools-Organization (YES-O) are integrated into the science curriculum. The teachers were able to integrate environmental concepts and topics that apply to the learning competencies in science. As part of their instruction, they incorporated activities into their lesson plans. During the interview, one school principal (P1) shared:

*"Because YES-O has a very wide scope and is all about the environment, and since one of the core values of DepEd is 'Makakalikasan', I believe that the only way you can encourage and motivate them is to integrate it into their subjects, especially in science. I do believe in this, and I can say that one hundred percent because I am always observing my teachers and checking their lesson plans. I do believe that this is incorporated into the lesson. We have good reports in terms of the collection of plastic and plastic bottles because environmental education and individual responsibility are integrated into the classroom."*

In the study of [Desfandi et al. \(2016\)](#), based on their findings, they argued that the school principal had advised, directed, and supervised the implementation of an environmental-based curriculum. To bring learning closer to local conditions while training students to overcome environmental problems that occur in the surrounding environment, school principals should always advocate for teachers to be able to raise local environmental issues and problems in learning and relate them to learning material. The governing principles of the YES-O were also integrated across all other learning areas to become more relevant to all learners. One school principal (P3) shared during the interview:

*"...and then series of information from time to time to incorporate in different learning areas and to become makakalikasan in protecting the environment."*

The study suggests that appropriate teacher education in environmental education is essential for providing socially relevant and non-traditional pedagogies as proposed by [Tal and Peled \(2017\)](#). Upskilling of the teachers should be intensive to make EE more inclusive and interdisciplinary, and if it is to educate for independent thinking and action competence among the learners.

Another sub-theme that emerged which may be attributed to integrated school efforts is the alignment of DepEd Vision, Mission, Goals, and Objectives (VMGO). The plans and/or PPAs of YES-O are in line with DepEd's VMGO. This means that the implementation of YES-O programs has contributed to the delivery of basic education services in schools, particularly in the context of junior high schools as the focus of this study. In the context of the participating schools, they are well-guided by the DepEd issuances and provisions of the YES-O in their respective schools. One of the facilitators/teacher-advisers is the president of the federation of the YES-O facilitators/teacher-advisers in the school division. One of their activities is to ensure that all PPAs of the YES-O are aligned with the DepEd's vision, mission, goals, and objectives as stated in the mandated YES-O objectives found in DepEd Order No. 072, s. 2003 and DepEd Order No. 093, s. 2011. The school principal made sure that all activities proposed by the YES-O were aligned with the core value of "*Makakalikasan*" and supported the objectives mandated by YES-O before approving the Calendar of Annual Proposed Activities (CAPA). Based on the interview, Principal 1 (P1) shared that:

*"... when they come up with their projects and activities, it should be aligned with the DepEd mission and vision."*

According to a study conducted by [Maryono \(2015\)](#), environmental education is a policy that aims to cultivate and develop the knowledge, values, attitudes, behavior, and insights of learners and communities. It also includes raising awareness about environmental concerns. This policy is implemented in daily learning activities based on the vision, mission, and objectives of the environmental program in schools ([Astuti & Aminatun, 2020](#); [Nurwidodo et al., 2020](#); [Waqidah et al., 2020](#)).

Another best practice of YES-O is to align the proposed activities with the school activities. During the crafting of the Calendar of Annual Proposed Activities (CAPA), the student officers and YES-O facilitators/teacher-advisers highly considered the school calendar. The organization's activities take into consideration the existing school activities including academics and other activities indicated in the prescribed school calendar of the DepEd. During the interview, one facilitator/teacher-adviser (F/T-A1) mentioned that they based their CAPA on the calendar of activities of DepEd. According to her:

*"My basis is the DepEd Calendar of activities for it was already stated there as to what needs to be celebrated. For example, on Earth Day, during this celebration, we get a chance to conduct a clean-up drive and eco-saver climate change activities. We based our activities on the DepEd calendar so we can specifically and simultaneously do activities in line with the national celebration."*

One student officer, Allan, shared during the FGD:

*"... it is also the celebration of Science Month, so we do it simultaneously."*

This kind of practice of the YES-O is to make sure that there will be no overlapping of the YES-O activities and school activities but instead align the proposed YES-O activities to the DepEd calendar of activities. Moreover, the strategic way of scheduling the activities can avoid disruption of classes which may affect the curricular-related activities of the student officers. One student officer who answered the survey questionnaire commented:

*"YES-O scheduled the activities so that it will not affect our academics."*

School's programs are connected and integrated. One of the school activities is the school-based Feeding Program. The YES-O actively participated in the "*Gulayan sa Paaralan*" wherein the harvested crops/vegetables were used for the Feeding Program. A school principal shared:

*"We plant in the garden. One time, during the garden clean-up, they were able to harvest sweet potatoes and vegetables that we were able to cook and eat. In addition, we were also able to use these vegetables for our feeding program with the support of our stakeholders. Through this partnership and program, we were able to conduct a feeding program twice a month in which we identify the student in our school who becomes the beneficiary and recipient of the program."*

This shows that as an organization, YES-O student officers considered as part of their annual activities the importance of social responsibility and in help of the other learners in their school in terms of fighting hunger and malnutrition which is one of the factors of students at risk of dropping out in school.

YES-O is very open in terms of initiating and welcoming collaborative conduct and implementation of their activities. The organization works with other existing student clubs or organizations in the school for their plans and/or activities. The participants shared the same practice about how YES-O collaborates with the other school organizations based on the survey, FGD, and interview. One facilitator/teacher-adviser shared:

*"We also try to not only focus on working on YES-O but also working with other clubs that have goals similar to ours. We are joined by different clubs like GPTA, Teachers and Faculty Club, it's like all the school clubs can collaborate with us. This is the GSP of the other subject clubs and science clubs."*

Collaboration among student organizations in the school shows that there is a strong support system because of strategic planning to ensure effective and efficient management of resources. Based on the interview, a school principal shared:

*"... for example, if it is September, it is the month of science so that clubs under the Science will*

*have an opportunity, they come up with an activity in which all of the clubs are working together in one department."*

Both the science club and YES-O are under the care of the science department. Though there are two different student organizations, there are relevant activities collaboratively conducted and/or being implemented by the student officers when it comes to activities related to environmental education. YES-O also contributed to the success of "Brigada Eskwela" which is also known as the National Schools Maintenance Week, an annual nationwide voluntary effort program of DepEd that aims to address resource gaps faced by the Department through strengthening partnerships with the local communities. As an integrated effort of the school, various school organizations and community stakeholders come together in the spirit of volunteerism to prepare the school for the opening of classes and ensure the delivery of basic education services. During the interview, a school principal (P1) mentioned the contribution of YES-O in the annual conduct of "Brigada Eskwela". He mentioned:

*"Before the start of the class during the Brigada Eskwela, we conducted a project that aims to restore the "School Vegetable Garden" partnered with YES-O. As a result, we had a memorandum of agreement with Binhi Philippines in harvest."*

The "Gulayan sa Paaralan" is one of the annual events of the "Brigada Eskwela" which highlights the school-family-community partnerships to promote sustainable food supply. The school principal added:

*"There's this one time that someone donated Koko mushrooms ready to be harvested for our organization. The mushroom was not just ready to be harvested but also ready to become produce and this became our harvest. We were able to sell around 20 kg of mushrooms, and this has now become part of the Income Generating Project. This is now a joint effort of YES-O and School Vegetable Garden."*

There is a synergy among school organizations wherein YES-O plays a very important part. The full involvement of the concerned committees in building partnerships for environmental learning and environmental protection and management efforts is indispensable to better prepare these individuals and communities to collaboratively undertake positive environmental action (Ardoin et al., 2020; Priambodo et al., 2021). Through collaborative approach among various groups of individuals provides a context to form a coalition of multiple stakeholders in advocating climate-centered policies (Pattison et al., 2021).

Given the school closures due to the COVID-19 pandemic, the Parents-Teachers Association (PTA) strongly supports the "Gulayan sa Paaralan" wherein they come to school and help maintain and cultivate the school gardens. A school principal (P1) shared:

*"Here in our school, we still have the partnership with our parents in which some of our parents are very active in coming here to school. Most of the time they are even the ones who cultivate and take care of the gardens. They do not only take care of the ornamental plants but also the vegetable garden. Since we have a school vegetable garden, the parents are continuously encouraging the students to continue what they are doing, especially at their own respective homes."*

The DepEd reminds school heads to implement "Gulayan sa Tahanan" to continue the purpose of promoting sustainable food supply at home. This is one of the integrated school programs that YES-O has a great role in. A school principal (P2) shared that:

*"Yes, we extended our practices not only in the school of course but also in their own houses as part of our urban gardening. We encourage them to use PET bottles as their pot for their plants. We also have a plan for "Brigada Eskwela" that if there is Gulayan sa paaralan (School Vegetable Garden) there should be Gulayan sa Tahanan (Home Vegetable Garden) so students can use this opportunity to apply whatever they have learned from school. And then, the students just send pictures as MOV (Means of Verification) as proof that they are part of the program."*

This shows that even in this time of pandemic, the YES-O continues to be part of the school's program like the "Gulayan sa Tahanan" as an extension of the "Gulayan sa Paaralan" so that the learners can still actively participate and perform their share as active stewards of the school and community in promoting environmental conservation and protection in the domain of food security and food sustainability. However, due to major global transitions, food security and environmental sustainability are likely to be aggravated at present and in the coming years (Shafiee-Jood & Cai, 2016).

The YES-O facilitator/teacher-adviser will provide a full orientation to the new set of student officers with the assistance of the science department head, subject to the approval of the school principal. As stated in Enclosure No. 1 to DepEd Order No. 072, s. 2003 regarding the constitution and by-laws of the YES-O, it is stated in Article VII, Section 2 item letter g that the YES-O shall orient the succeeding officers on current undertakings of the YES-O. Students received guidance from their teacher-advisers, school heads, and previous student officers during their planning, and submitted the necessary documents to them. The previous officers of the YES-O shall turn over papers, documents, and properties to the succeeding YES-O executive committee officers (Article VII, Section 2 item letter f of Constitution and By-laws of the Youth for Environment in Schools-Organization). The first goal is that the newly elected set of officers should prepare their Calendar of Annual Proposed Activities (CAPA) for the approval of

the school head. This is one of the important reminders based on the timeline mentioned in Enclosure No. 4 of the DepEd Order No. 093, s. 2011. The preparation of the CAPA should happen between June to July of the current school year. The approved CAPA should be submitted every July 30 or within 30 days from the date of registration. The student officers of the YES-O were given a template of the CAPA stated in Enclosure No. 5 to DepEd Order No. 093, s. 2011. Using the template, the student officers are going to craft their target PPAs based on the mandated PPAs of the YES-O. The student officers were being assisted by their teacher-adviser in the crafting and after taking into consideration the Annual Accomplishment Report of the YES-O from the previous school year submitted by the previous YES-O student officers. The template for the Annual Accomplishment Report (AAR) of the YES-O is found in Enclosure No. 6 to DepEd Order No. 093, s. 2011. The document was a big help for the succeeding student officers to plan for their CAPA based on the actual accomplishments vis-à-vis targets relative to the mandated YES-O PPAS, key performance indicators, target beneficiaries, time frame, and status. One school principal (P1) based on the interview shared about the annual accomplishment report of the previous YES-O. She said that:

*“... the files were kept here in the school so from time to time they can look to their action plan for a year.”* During the FGD, one student officer, Hazel, commented *“Yes Sir, we see the documents and their narratives as our guide as we are only new officers.”*

In the CAPA of the succeeding officers, they can be able to sustain the PPAs, adjust the time frame, and or any other necessary modifications if the status of the targeted PPAs were completed, ongoing, or deferred because of unexpected situations. The student officers were allowed to sit down to discuss the CAPA of the YES-O. The student officers were supervised and guided by their teacher-adviser during their meetings as to what activities needed to be included and were feasible. The draft of the plan was carefully done before the approval. During the FGD, one student officer, Prinz, shared:

*“There is an instance that it is like that if it's a specific project because once we already have the action plan, then it needs to get approved. During the drafting process at the very beginning, there are instances that a project or activity does not get continued because it is not yet final. Our action plans were checked by the teacher-adviser and principal.”*

The CAPA was carefully planned in terms of its date and the activities should be aligned to the goal and vision of the YES-O. It can be gleaned that the student officers were knowledgeable, and they practiced the chain of command relative to the crafting of their action plan as part of the CAPA, checking of the CAPA by their teacher-adviser and to be noted by the science department head, and finally seeking the approval of the CAPA by their school principal. Based on the interview, a school principal (P2) shared that:

*“Before approving the projects and activities, immediately we sit together as a team. Since most organizations already have a proposal, we make sure that we check it right away. Not just me but together with the department heads. So, once it is okay, we ask for some changes revisions, and changes that must be made then afterward I'll sign and approve the program. Thus, during the preparation, the school head and department heads are all involved to have a better plan and proposal.”*

This kind of practice was similarly shared by another school principal (P1) during the interview:

*“After that they come up with an action plan, they submit their action plan to the adviser and then the adviser will also seek the approval of the department head then from me.”*

The schools follow a systematic and organized process to ensure that the CAPA is well-planned and strategically crafted with the guidance and supervision of the teacher-adviser and by the provision of technical assistance from the science department head and school head. Adoption of sustainable development concerns in strategic planning is necessary as a dimension of sustainable development and academic administrative services with an emphasis on environmental education necessary to ensure the effective delivery of programs (de Andrade Guerra et al., 2018).

The school supports the promotion of the YES-O principles and/or the implementation of its initiatives through issued memoranda by the school principal. This is to promote the PPAs of YES-O to all internal and external stakeholders. This practice demonstrates that schools are effectively utilizing integrated efforts, as there is a clear basis for implementing the target PPAs. Based on the interview, one school principal (P2) shared about how the school memorandum can inform the stakeholders and engage them to participate in the activities of the YES-O. He mentioned:

*“We usually circulate information through an issued school memorandum. So, all programs and activities of the school are informed and disseminated to the school community. Not only the students and teachers are included, but also the parents.”*

The result supports the findings in the study of Desfandi et al. (2016), wherein the school principal plays a key role in the development of environmental school policies. The commitment of the school principal to environmental issues plays a significant influence in the formation of school policy (Boeve-de Pauw & Van Petegem, 2018; Maryono, 2015; Wodika & Middleton, 2020). The school principal's dedication and concern for addressing environmental problems is crucial in implementing the school's environmental policy.

The YES-O of the school prepared for the target date of the activities so that it will be promoted and campaigned to students, teachers, and community stakeholders. All school stakeholders are now better informed about the school's policies to ensure successful YES-O activities. The policies were being translated as part of the school's practice and manifested in the student's behavior. One student officer, Allan, during the FGD, shared about a certain program of the YES-O. He mentioned:

*"In our case, we do the ten o'clock and four o'clock habit. That is a program of the barangays, and it inspires us to do the same at school. Every ten o'clock and four o'clock, we ring the bell and then that is the time when the people sir from the school should pick up trash from the grounds and in the classroom which they will all bring to a bin located in the school grounds."*

This project, initiated under YES-O, began as a school policy and eventually became a part of the attitude and behavior of the students, teachers, and members of the school community. They will benefit from it if they ensure the cleanliness of the school environment. Another program that is supported by a school policy is about limiting the use of single plastic, reducing the garbage, and making everyone more responsible. One school principal (P2) during the interview shared about garbage or single-use plastic. He mentioned:

*"In the canteen, we do not allow them to sell bottled water, instead, the students will bring their tumblers and they will just get water from the water dispenser. So, we do not encourage the canteen to sell bottled water. As a result, we lessen the use of plastic, and we lessen the garbage in our school."*

As a venue to formally educate the learners, the YES-O in the school has adopted the policy of the Local Government Unit (LGU) as part of the school's policy on waste reduction and solid waste management. This is to educate the learners about the values of practicing the protection of the environment and being aware of the effects of waste being mismanaged. During the interview, a school principal (P3) mentioned:

*"Yes, because here in Marikina, they are strict. This means that this form of strictness is leading to protecting our environment because we are all going to suffer if it's destroyed. No littering, for example, is one of the best practices in our school. That small garbage, you put it in your pocket. Yes, that's why we extend our activities outside of the school for our students to know and practice this knowledge and programs. Also, they will see the scenario as to what will happen if they litter somewhere, we let them realize what will happen and what will be the effects of these bad scenarios. So that practice will help our students to think about what is good and how to support the environment and instill in them how to become an environmentalist, and practice not only in school but also at home and everywhere they go."*

Everyone in the school and the community is highly aware of the effects of improper waste disposal. The school's support extends to all stakeholders, including teachers, non-teaching staff, and students. Engaging external stakeholders is easier when internal stakeholders actively participate and support YES-O activities. Moreover, the internal stakeholders can be able to invite the community including the parents to support the various environmental activities of the YES-O if they see that the learners have pro-environmental behavior. The PPAs of the YES-O will not be possible without the help and assistance from the stakeholders of the school. Therefore, the internal stakeholders were the ones that should be convinced first that they can be able to make a difference for the sake of the environment. The support of the school to YES-O does not end only during the implementation of the PPAs but in the maintenance and sustaining of it. During the interview, a school principal (P1) mentioned:

*"... for us it is simply a vertical garden for them the challenge also is how to maintain it. It is always in the hands of the advisers, the department head, and I because I love working on these."*

The YES-O of the school had established a vertical garden and to sustain the project, the school engaged the help and assistance of everyone to maintain the garden even during the time of pandemic where students are not in school.

The provision of support to the school leadership for the promotion of the YES-O principles and activities has been the practice of the school principals. This is not because it is mandatory to do but school principals as leaders of the school want to highlight the relevance of having the YES-O as a lead organization in educating the learners as part of their co-curricular activities. A school principal (P3) mentioned during the interview that:

*"As a school head, I need to support the program which is one of my primary functions when it comes to co-curricular activities given to us by the Department of Education. So, we all know that we have a lot of activities that we continuously do. The YES-O adviser shares the same perspective as I do that's why I observe and know all this program related to the environment to which I support 100 %."*

The YES-O of the school vouches for the support of the school principal. A YES-O facilitator/teacher-adviser (F/T-A1) shared during the interview that:

*"Our current principal is very supportive. She supports almost all our activity about the environment."*

Leading by example is the mantra that the school principals wanted to show in this case. They can make the organization active by supporting the advocacies of the YES-O and being a model to the student

leaders. A school principal (P2) during the interview mentioned that:

*"I can consider myself as a man of action through actual performance that we do about the environment. So being a role model to the students helps to encourage them to participate in their respective organization)."*

As the highest official at the school level, the leadership of the school principals can make an impact on the success of the YES-O wherein they can inspire and motivate the learners to become more participative in the activities while benefiting from the services of the school. The school principal should involve the entire school community to effectively promote environmental education. In the study of [Desfandi et al. \(2016\)](#), they concluded that principals of schools should serve as mentors and role models. and a motivator for their subordinates, the teachers and school staff, as well as the students in the classroom doing a variety of things. The excitement of school principals for leading students through environmental management activities might be beneficial. encourage students to take an active role in the school management environment. This shows that the school principal has the authority to implement environmental policies, provide financial support, and suggest innovative and achievable programs and activities to encourage students to become more environmentally conscious.

## Participatory Approach

Students participate actively in the planning and implementation of the PPAs for the YES-O. This can be observed when they work collaboratively, actively participate, and encourage membership. The student officers helped each other to organize the PPAs of the YES-O. Moreover, they also develop among themselves the value of being responsible for the duties or tasks assigned to them. One student officer shared:

*"I learned that we should know our duty and the responsibilities that were assigned to us. And learn to listen to the opinions of other people to improve your work."*

Helping each other will make the tasks easy to accomplish and finish on time. To work collaboratively, students collaborate, listen, and exchange ideas to plan and implement their YES-O programs. The results corroborate with the findings of [Williams and Chawla \(2016\)](#) that students who participated in the study recalled a strong sense of group identity wherein they felt accepted and appreciated as members of a group they came to admire. Furthermore, the findings of [Goldman et al. \(2017\)](#) show that youth view themselves as role models to their young peers where they are willing to support environmentally-related activities in such a way they can demonstrate a strong self-efficacy as agents of change. Likewise, young people have been observed trying to engage other young citizens in discussing the causes of environmental issues and concerns such as climate change and activities that cause environmental degradation ([Riemer et al., 2014](#)). Another student officer shared:

*"The good practices I employed as a YES-O student officer are being open, suggesting ideas, and listening to my co-officers."*

The YES-O practiced the consultative approach wherein student officers listened to the ideas and suggestions of everyone in the group. They were able to come up with a good action plan in their CAPA by having a healthy discussion that would benefit the target participants. Another student officer shared about their regular meetings to talk and discuss among them the suggestions that will help them better perform their tasks and implement the activities. Being open-minded welcomes opportunities to hear from others and learn. The student officer mentioned:

*"... were having a weekly meeting so we could hear other suggestions and we could design some activities that suit for all. The different perspectives and suggestions can allow us to be more open and learn from them."*

Environmental education programs need the participation and cooperation of various parties involved so that the results are optimal to avoid any arising conflict ([Priambodo et al., 2021](#)). Active participation and engagement in various YES-O activities allow the students to be immersed in the real situation and current state of the environment. A facilitator/teacher-adviser shared that the actual involvement of the students can open their minds and serve as an eye-opener for them to act to help the environment. Though organizing symposiums can help to advocate environmental protection and conservation, hands-on activities, tours, and immersion activities can also help to have strong participation and engagement among them. The facilitator/teacher-adviser (F/T-A1) mentioned:

*"Our students have a lot of actual engagement, so they see the current state of our environment, especially during our clean-up. There are even times that we clean every month, but the garbage is not disappearing/exhausting. These are the instances in which our students become aware of the environment."*

She added:

*"Yes, hands-on actual involvement. We do not only limit the involvement and exposure of our students to garbage but also to eco-tour. They see the beauty and other side of Manila like when we went to water sheds, they see the beauty of the environment. So, it's a big thing that they get exposed and involved not only through symposiums."*

The YES-O program implementation is not just only for the student officers and members of the

organization. The advocacy of YES-O is for the students wherein environmental education takes place in the school and for the community stakeholders as well. To increase the number who will participate in the PPAs of the YES-O, stakeholders (school leaders, advisers, students) encourage others to be part of the YES-O and involve themselves. The guidance of the teachers and regular customization of the student's learning environment to their needs and abilities allowed for increased learning and encouraged students to participate in Eco-School activities (Schröder et al., 2020).

## Monitoring and Evaluation

Monitoring and evaluation are an important emerging theme based on the practices of successful YES-O program implementation that cover all strategies to monitor and evaluate the activities and programs of the YES-O in schools. This may be in the form of formal or informal procedures that seek to track whether the organization achieved its targets. It is important to provide regular updates on the progress of the project. One way to improve the effectiveness of the PPAs is to either submit a formal accomplishment report or arrange a meeting to receive feedback on how to enhance them. The goal is to ensure that the PPAs are meeting the needs of stakeholders within the school and the community. The activities outlined in the action plan, which is part of the CAPA of the YES-O, were managed through regular weekly meetings. One student officer shared:

*"... by weekly meeting to discuss every project and activity that are in our action plan. By doing this, we will be able to monitor the improvement of specific projects or activities."*

Tracking of the activities stated in the CAPA is very important so that they can be able to prepare as early as possible. This is also to monitor their accomplishments and note the things that need to be improved in the succeeding activities. They did not have to monitor the activities for the sake of compliance and enough to say that a certain activity was done already but also to note if the activity brought significant effect to the school in terms of issues and concerns that the YES-O is trying to address. Another student officer shared:

*"... daily checking and monitoring of the activities and programs that we did, see if there are any significant changes and such."*

The organization allows feedback from the participants of the activities to know the things that need to be sustained and those things that require changes and modifications for the betterment. One student officer shared:

*"There was an evaluation to know if the event or activity was successful by looking at the contribution and the feedback of the students who participated. We asked for the students' insights."*

The organization has accurately documented all the activities. It is important to determine the significant changes and improvements in the school and the community after implementing the activity. During the interview, a school principal (P2) mentioned:

*"First, we have before and after documentation so we can see whether something has changed and whether there is sustainability to what we did, and that's the first thing that we consider. Second, we also investigate how influential an activity is to the life of a person and its effect that even if the activity or the program is done, once it becomes a habit, that person is going to carry that practice and eventually that practice will multiply. That is what I can say is one of the best success indicators of the plans, programs, and projects under the YES-O."*

The school principal requested a progress report on YES-O's PPAs from the organization. Based on the result of the interview, a school principal (P2) shared:

*"I asked the adviser or the chairman to report as to what is the status of the program. All of them, so when the club advisers are reporting and updating, they also include all the succeeding activities so that the school community will be aware of it. They get informed as to what is happening to each organization. That's what I do, I need the teacher or the adviser to be updated regarding the success of their organization, at the same time, if there are needs and challenges so we can help them."*

The YES-O submits an Annual Accomplishment Report (AAR) using the template found in Enclosure No. 6 to the DepEd Order No. 093, s. 2011. During the FGD, a facilitator/teacher-adviser (F/T-A3) shared:

*"The accomplishment report is submitted yearly."*

To assess the efficacy of programs, monitoring, and assessment of the activities that have been implemented is necessary. It aids in determining when a program is on track and when adjustments are required. Program monitoring will offer ongoing information for improvement, while program evaluation will occur at the end of the school year.

Transparency concerning monitoring and evaluation emerged as a sub-theme. Transparency is being practiced in all transactions and aspects of operation, to the stakeholders. One student officer shared:

*"We often have dialogue and promote transparency to have a conversation and meeting regarding reports and updates."*

As a student leader, it is very important to note that being trustworthy and honest will encourage more

followers because he/she is accountable for whatever outcomes and results of his/her actions. It can be concurred that the involvement of the stakeholders in the planning and implementation is very important where the monitoring and evaluation is a good plan for the implementation of programs and projects (Kathongo, 2018). The accomplishment report is a document that serves as means of verification for the school level, division level, and regional level at the same time to know the status of the YES-O program in terms of monitoring and evaluation stated in Enclosure No. 7 to the DepEd Order No. 093, s. 2011. Moreover, the school recognized the accomplishments of the YES-O to appreciate their efforts. The school acknowledged the significant contributions and accomplishments of the YES-O teachers, student officers, and community stakeholders. A school principal (P3) during the interview shared:

*"We give recognition to teachers who join or who especially help with the activity. Also, a part of our practice is to acknowledge the contribution of our stakeholders, we need to recognize them."*

*These are some of the practices that we do every mid-school year or end of the school year."*

The schools are more motivated and inspired to sustain the YES-O program by launching the "Gawad Siklab" as per DepEd OUA Memo 00-0321-0042 dated March 03, 2021, wherein YES-O is one of the recipients to be given the awards in various categories such as YES-O best implementer, YES-Outstanding Student Leader, YES-O Outstanding Teacher-Adviser, and YES- Recognition Award for School Head. The schools have been practicing giving recognitions at the school level, not until the onslaught of the COVID-19 pandemic. The guidelines issued by the DepEd on "Gawad Siklab" will surely drive and motivate the YES-O implementing schools as well to become more innovative and responsive to achieve the purpose of YES-O while strengthening Environmental Education in schools.

## Conclusion

The study was conducted to assess the performance of the secondary schools with the best practices of the YES-O program implementation. The emerging themes relevant to the effective implementation of the YES-O program were documented by analyzing the best practices of successful schools. In addition, the best practices of the YES-O program implementation were described and supported by the emerging themes focusing on the following areas: (a) personal advocacy which was observed in the areas of advocacy; (b) resource availability which was observed in the areas of budget allocation, fund sources, and partnership with stakeholders; (c) flexibility which was observed in the areas of maximizing the online platform; (d) integrated school efforts which was observed in the areas of curriculum integration, alignment with the DepEd Vision, Mission, Goals, and Objectives, alignment with school activities, collaboration with existing school programs, collaboration with other school organizations, integrated school programs, guided planning, school policy support, school support, supportive school leadership, and communicates programs with stakeholders; (e) participatory approach which was observed in the areas of collaborative work, participatory, and encourage membership; and (f) monitoring and evaluation strategies which was observed in the areas of regular monitoring and evaluation of the YES-O PPAs, recognition of stakeholders contribution, and transparency in the crafting of plans and preparation of documentations.

Meanwhile, to support the best practices in the implementation of the YES-O program in secondary schools, capacity building, and strong networks and linkages emerged as other themes focusing on domain opportunities because of the implementation of the program. The best practices of the schools with successful implementation of the YES-O program based on the emerging themes offer a wide opportunity for a strong foundation in achieving the mandated objectives of the YES-O which are merely applicable up to the present time. The participating schools have established effective approaches and practices while implementing the program that benefited the schools in various aspects. Moreover, the overall goal of establishing the YES-O program in the schools was achieved because of strengthened environmental education contributed by various support mechanisms. The "Makalikasan" core value of the DepEd is very eminent and observed in the implementation of the YES-O in the participating schools. Given the continuous implementation of the YES-O program in junior high schools, the following specific recommendations are hereby offered to sustain the program: (1) the schools can continue their practices to sustain the implementation of the program. Likewise, the schools should also consider the indicators which are areas for improvement to enhance their performance such as strengthening of their networking, linkages, and partnership strategies to engage convergence and synergize the environmental education in view of the mandated PPAs of the YES-O program implementation; (2) a school-based checklist for the school assessment of the YES-O program implementation should be developed to conduct a school-based assessment on the strengths and weaknesses of the implementation of the PPAs of the YES-O which anchored on the DepEd mandated objectives of the YES-O; (3) the Youth Information Division of the DepEd central, regional office, down to the may be capacitated by the DepEd in partnership with the government agencies, LGUs, business and industry partners, and NGOs for them to be able to provide technical assistance to YES-O program implementing schools; and (4) the curriculum implementers, the teachers, should be capacitated on the integration of environmental topics and strengthened their teaching competencies in designing and developing

activities as part of the curriculum instruction. Teachers will benefit from capacity building and training to ensure that they use a variety of approaches, strategies, methods, and learning methodologies in their classrooms and school co-curricular activities that would actively engage students and create local issues in learning about the environment.

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## Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

## Author Contributions

**A. P. Cadiz:** writing original draft preparation, review and editing; methodology and analysis. **L. A. S. Cortez:** writing original draft preparation, review and editing.

## References

- Ali, A. R., Endut, A., & Embong, R. (2017). Investigating the environmental awareness level of secondary school students: Effects of race, school type, and location. *Journal of Science and Technology*, 9(4), 30–36. <https://publisher.uthm.edu.my/ojs/index.php/jst/article/download/2055/1289/7077>
- Aliman, M., Budijanto, Sumarmi, & Astina, I. K. (2019). Improving environmental awareness of high school students' in Malang city through earthcomm learning in the geography class. *International Journal of Instruction*, 12(4), 79–94. <https://doi.org/10.29333/iji.2019.1246a>
- Amran, A., Perkasa, M., Satriawan, M., Jasin, I., & Irwansyah, M. (2019). Assessing students 21st century attitude and environmental awareness: Promoting education for sustainable development through science education. *IOP Conf. Series: Journal of Physics: Conf. Series* 1157, 1157, 1–5. <https://doi.org/10.1088/1742-6596/1157/2/022025>
- Ardoin, N. M., Bowers, A. W., & Gaillard, E. (2020). Environmental education outcomes for conservation: A systematic review. *Biological Conservation*, 241(November 2019), 108224. <https://doi.org/10.1016/j.biocon.2019.108224>
- Ardoin, N. M., Bowers, A. W., Roth, N. W., & Holthuis, N. (2018). Environmental education and K-12 student outcomes: A review and analysis of research. *The Journal of Environmental Education*, 49(1), 1–17. <https://doi.org/10.1080/00958964.2017.1366155>
- Astuti, D., & Aminatun, T. (2020). Student's environmental literacy based on Adiwiyata and non-Adiwiyata at senior high school in Sleman, Yogyakarta. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, 6(3), 375–382. <https://doi.org/10.22219/jpbi.v6i3.13629>
- Bergman, B. G. (2016). Assessing impacts of locally designed environmental education projects on students' environmental attitudes, awareness, and intention to act. *Environmental Education Research*, 22(4), 480–503. <https://doi.org/10.1080/13504622.2014.999225>
- Boeve-de Pauw, J., & Van Petegem, P. (2018). Eco-school evaluation beyond labels: the impact of environmental policy, didactics and nature at school on student outcomes. *Environmental Education Research*, 24(9), 1250–1267. <https://doi.org/10.1080/13504622.2017.1307327>
- Buchanan, J., Pressick-Kilborn, K., & Maher, D. (2019). Promoting environmental education for primary school-aged students using digital technologies. *Eurasia Journal of Mathematics, Science and Technology Education*, 15(2). <https://doi.org/10.29333/ejmste/100639>
- Cadiz, A. P., Pascual, C. B., & Evangelista, E. V. (2018). Disaster resilience level of selected barangays in Quezon City, Philippines. *Asia Pacific Higher Education Research Journal*, 5(2), 1–14. <https://po.pnueresearchportal.org/ejournal/index.php/apherj/article/view/1024>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing: JRN*, 25(8), 652. <https://doi.org/10.1177/1744987120927206>
- Cardarelli, K. M., Ickes, M., Huntington-Moskos, L., Wilmhoff, C., Larck, A., Pinney, S. M., & Hahn, E. J. (2021). Authentic youth engagement in environmental health research and advocacy. *International Journal of Environmental Research and Public Health*, 18(4), 1–12.

- <https://doi.org/10.3390/ijerph18042154>
- Cardarelli, K. M., Paul, M., May, B., Dunfee, M., Browning, S., & Schoenberg, N. (2019). "Youth are more aware and intelligent than imagined": The mountain air youth photovoice project. *International Journal of Environmental Research and Public Health*, 16(20). <https://doi.org/10.3390/ijerph16203829>
- Clare, A., Robles, M. O., Marie, E., & Verana, O. (2012). Environmental sustainability program implementation of public schools of General Santos City: Basis for environmental advocacy framework. *Environmental Management and Sustainable Development*, 1(2), 64–73. <https://doi.org/10.5296/emsd.v1i2.2066>
- de Andrade Guerra, J. B. S. O., Garcia, J., de Andrade Lima, M., Barbosa, S. B., Heerdt, M. L., & Berchin, I. I. (2018). A proposal of a Balanced Scorecard for an environmental education program at Universities. *Journal of Cleaner Production*, 172, 1674–1690. <https://doi.org/10.1016/j.jclepro.2016.11.179>
- Derrien, M. M., Zuidema, C., Jovan, S., Bidwell, A., Brinkley, W., López, P., Barnhill, R., & Blahna, D. J. (2020). Toward environmental justice in civic science: youth performance and experience measuring air pollution using moss as a bio-indicator in industrial-adjacent neighborhoods. *International Journal of Environmental Research and Public Health*, 17(19), 1–18. <https://doi.org/10.3390/ijerph17192728>
- Desfandi, M., Maryani, E., & Disman, D. (2016). The role of school principal leadership in implementation of eco school program as the effort to support sustainable development. *Proceedings of the 6th International Conference on Educational, Management, Administration and Leadership*, 197–200. <https://doi.org/10.2991/icemal-16.2016.40>
- Garzón-Díaz, E. (2021). From cultural awareness to scientific citizenship: implementing content and language integrated learning projects to connect environmental science and English in a state school in Colombia. *International Journal of Bilingual Education and Bilingualism*, 24(2), 242–259. <https://doi.org/10.1080/13670050.2018.1456512>
- Goldman, D., Pe'er, S., & Yavetz, B. (2017). Environmental literacy of youth movement members—is environmentalism a component of their social activism? *Environmental Education Research*, 23(4), 486–514. <https://doi.org/10.1080/13504622.2015.1108390>
- Hahn, E. J., Wilmhoff, C., Rayens, M. K., Conley, N. B., Morris, E., Larck, A., Allen, T., & Pinney, S. M. (2020). High school students as citizen scientists to decrease radon exposure. *International Journal of Environmental Research and Public Health*, 17(24), 1–10. <https://doi.org/10.3390/ijerph17249178>
- Ham, M., Mrčela, D., & Horvat, M. (2016). Insights for measuring environmental awareness. *Ekonomski Vjesnik*, 1, 159–176. <https://hrcak.srce.hr/ojs/index.php/ekonomski-vjesnik/article/view/3661>
- Iftekhar, S. N., & Marasigan, A. C. (2019). Contextual-critical GCE, ecopedagogical framings of. In M. A. Peters & R. Heraud (Eds.), *Encyclopedia of Educational Innovation* (pp. 1–6). Springer Nature Singapore Pte Ltd. [https://doi.org/10.1007/978-981-13-2262-4\\_76-1](https://doi.org/10.1007/978-981-13-2262-4_76-1)
- Janmaimool, P. (2017). Investigating pro-environmental behaviors of well-educated people in Thailand: Implications for the development of environmental communication. *International Journal of Sociology and Social Policy*, 37(13–14), 788–807. <https://doi.org/10.1108/ijssp-02-2017-0014/full/xml>
- Johnston, J. E., Juarez, Z., Navarro, S., Hernandez, A., & Gutschow, W. (2020). Youth engaged participatory air monitoring: A 'day in the life' in urban environmental justice communities. *International Journal of Environmental Research and Public Health*, 17(1). <https://doi.org/10.3390/ijerph17010093>
- Karpudewan, M., Roth, W. M., & Abdullah, M. N. S. Bin. (2015). Enhancing primary school students' knowledge about global warming and environmental attitude using climate change activities. *International Journal of Science Education*, 37(1), 31–54. <https://doi.org/10.1080/09500693.2014.958600>
- Kathongo, S. M. (2018). Influence of participatory monitoring and evaluation on performance of public secondary schools projects in Mutomo Sub-County, Kenya. *International Journal of Scientific Research and Management (IJSRM)*, 6(03), 154–168. <https://doi.org/10.18535/ijssrm/v6i3.el06>
- Labog, R. A. (2017). Teachers' integration of environmental awareness and sustainable development practices. *Asia Pacific Journal of Multidisciplinary Research*, 5(3), 102–110. <http://www.apjmr.com/wp-content/uploads/2017/08/apjmr-2017.5.3.2.14.pdf>
- LaPan, C. (2013). Review of QDA miner. *Social Science Computer Review*, 31(6), 774–778. <https://doi.org/10.1177/0894439313492711>
- Lester, J. N., Cho, Y., & Lochmiller, C. R. (2020). Learning to do qualitative data analysis: A starting point. *Human Resource Development Review*, 19(1), 94–106. <https://doi.org/10.1177/1534484320903890>
- Maryono. (2015). The implementation of the environmental education at "Adiwiyata" schools in Pacitan Regency (An analysis of the implementation of grindle model policy). *Journal of Education and*

- Practice*, 6(17), 31–42. <https://www.iiste.org/journals/index.php/jep/article/view/23586/23960>
- Merenlender, A. M., Crall, A. W., Drill, S., Prysby, M., & Ballard, H. (2016). Evaluating environmental education, citizen science, and stewardship through naturalist programs. *Conservation Biology: The Journal of the Society for Conservation Biology*, 30(6), 1255–1265. <https://doi.org/10.1111/cobi.12737>
- Misiaszek, G. W. (2020). Ecopedagogy: teaching critical literacies of 'development', 'sustainability', and 'sustainable development.' *Teaching in Higher Education*, 25(5), 615–632. <https://doi.org/10.1080/13562517.2019.1586668>
- Mohammed, M. P. (2018). Disaster risk reduction and management of Tarlac City. *Procedia Engineering*, 212, 77–84. <https://doi.org/10.1016/j.proeng.2018.01.011>
- Nurwidodo, N., Amin, M., Ibrohim, I., & Sueb, S. (2020). The role of eco-school program (Adiwiyata) towards environmental literacy of high school students. *European Journal of Educational Research*, 9(3), 1089–1103. <https://doi.org/10.12973/eu-jer.9.3.1089>
- Olsen, S. K., Miller, B. G., Eitel, K. B., & Cohn, T. C. (2020). Assessing teachers' environmental citizenship based on an adventure learning workshop: A case study from a social-ecological systems perspective. *Journal of Science Teacher Education*. <https://doi.org/10.1080/1046560x.2020.1771039>
- Pantongkam, M., Wongboonnak, S., & Khumwong, P. (2018). Teaching ecosystem and environment and its effect on the environmental consciousness of grade 9 students: A preliminary self study. *AIP Conference Proceedings*, 1923(1). <https://doi.org/10.1063/1.5019524/762044>
- Paredes-Chi, A., & Viga-de Alva, M. D. (2020). Participatory action research (PAR) and environmental education (EE): a Mexican experience with teachers from a primary rural school. *Environmental Education Research*, 1578–1593. <https://doi.org/10.1080/13504622.2020.1788515>
- Pattison, A., Henke, C. R., & Pumilio, J. (2021). Community-based climate action planning as an act of advocacy: a case study of liberal arts education in a rural community. *Journal of Environmental Studies and Sciences*, 11(2), 183–193. <https://doi.org/10.1007/s13412-020-00655-0>
- Perez, R. B. (2019). *Promoting a greener curriculum through environmental youth organizational program: A policy evaluation*. <https://eric.ed.gov/?id=ed602043>
- Priambodo, P., Aslamiah, & Rizalie, A. M. (2021). A implementation of the Adiwiyata school program through participatory-based environmental activities (Multi-site study at Banjarmasin 29 Public Middle School and Banjarmasin 8 Public Middle School). *Journal of K6 Education and Management*, 4(1), 24–36. <https://doi.org/10.11594/jk6em.04.01.03>
- Riemer, M., Lynes, J., & Hickman, G. (2014). A model for developing and assessing youth-based environmental engagement programmes. *Environmental Education Research*, 20(4), 552–574. <https://doi.org/10.1080/13504622.2013.812721>
- Runhaar, P., Wagenaar, K., Wesselink, R., & Runhaar, H. (2019). Encouraging students' pro-environmental behaviour: Examining the interplay between student characteristics and the situational strength of schools. *Journal of Education for Sustainable Development*, 13(1), 45–66. <https://doi.org/10.1177/0973408219840544>
- Salóte, I., Drelinga, E., Ilićko, D., Oðehnoviëa, E., & Zariúa, S. (2016). Sustainability from the transdisciplinary perspective: An action research strategy for continuing education program development. *Journal of Teacher Education for Sustainability*, 18(2), 135–152. <https://doi.org/10.1515/jtes-2016-0020>
- Sasson, I., Yehuda, I., & Malkinson, N. (2018). Fostering the skills of critical thinking and questioning in a project-based learning environment. *Thinking Skills and Creativity*, 29, 203–212. <https://doi.org/10.1016/j.tsc.2018.08.001>
- Schröder, L. M. U., Wals, A. E. J., & van Koppen, C. S. A. (2020). Analysing the state of student participation in two Eco-Schools using Engeström's Second Generation Activity Systems Model. *Environmental Education Research*, 26(8), 1088–1111. <https://doi.org/10.1080/13504622.2020.1779186>
- Shafiee-Jood, M., & Cai, X. (2016). Reducing food loss and waste to enhance food security and environmental sustainability. *Environmental Science and Technology*, 50(16), 8432–8443. [https://doi.org/10.1021/acs.est.6b01993/suppl\\_file/es6b01993\\_si\\_001.pdf](https://doi.org/10.1021/acs.est.6b01993/suppl_file/es6b01993_si_001.pdf)
- Sukma, E., Ramadhan, S., & Indriyani, V. (2020). Integration of environmental education in elementary schools. *IOP Conf. Series: Journal of Physics: Conf. Series*, 1–6. <https://doi.org/10.1088/1742-6596/1481/1/012136>
- Tal, T., & Peled, E. (2017). The philosophies, contents and pedagogies of environmental education programs in 10 Israeli elementary schools. *Environmental Education Research*, 23(7), 1032–1053. <https://doi.org/10.1080/13504622.2016.1153047>
- Waititu, P. (2021). Creating community based environmental awareness with social media: A Kenyan perspective. *Southern African Journal of Environmental Education*, 37(1), 21–42. <https://doi.org/10.4314/sajee.v37i1.2>
- Wanchana, Y., Inprom, P., Rawang, W., & Ayudhya, A. J. N. (2020). Environmental education competency: Enhancing the work of teachers. *Journal of Teacher Education for Sustainability*,

- 22(2), 140–152. <https://doi.org/10.2478/jtes-2020-0021>
- Waqidah, S. N., Suciati, S., & Ramli, M. (2020). Environmental literacy-based on Adiwiyata predicate at junior high school in Ponorogo. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, 6(3), 405–412. <https://doi.org/10.22219/jpbi.v6i3.12468>
- Williams, C. C., & Chawla, L. (2016). Environmental identity formation in nonformal environmental education programs. *Environmental Education Research*, 22(7), 978–1001. <https://doi.org/10.1080/13504622.2015.1055553>
- Wodika, A. B., & Middleton, W. K. (2020). Climate change advocacy: exploring links between student empowerment and civic engagement. *International Journal of Sustainability in Higher Education*, 21(6), 1209–1231. <https://doi.org/10.1108/ijshe-03-2020-0091/full/xml>