



## PERCEPTION OF SENIOR HIGH SCHOOL STUDENTS ON THE ROLE OF SCIENCE AND ENVIRONMENTAL ACLE CLUBS IN ENHANCING ENVIRONMENTAL AWARENESS

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### ABSTRACT

This qualitative research study investigates the role of the ACLE (Alternative Class Learning Experiences) science and environmental clubs in creating awareness, attitude change, and activism among Senior High School students of Colegio de San Juan de Letran Manila. It aims to portray how these clubs complement the learning that occurs in a classroom with real-life experience which brings depth of understanding and application of knowledge on the environment. Through qualitative case study methods, the researchers conducted FGD to gather the data. Findings show that being part of these clubs increases students' awareness of ecological issues, practice of eco-friendly behaviors, and development of leadership with collaboration skills through real-life hands-on projects and programs.

**Keywords:** ACLE Club, Environmental Awareness, STEM Awareness

### INTRODUCTION

#### Background of the Study

Climate change, pollution, and deforestation are just a few of the main global issues that require immediate attention but through education, people could raise awareness and teach students how to address these challenges. Senior High School students need a strong foundation on how they can be of any help in addressing these environmental problems. Educating students about the problems of the environment is important because it helps in gaining the knowledge, skills, and experience to take action to address present and future environmental issues (Hanane, 2024). Through Alternative Class Learning Experience (ACLE) clubs at Colegio de San Juan de Letran Manila, Letranites can learn not only about these problems but also some of the practical ways to engage students with real-world environmental issues, promote collaboration, leadership, and eco-friendly habits.

Smith (2020) mentions that environmental clubs play an important role in promoting being ecocentric to students—a belief that nature is as important as humans. Students who join environmental clubs tend to build a strong connection with nature and become more aware of their responsibilities to protect the environment (Smith, 2020). His findings support the idea that clubs like these can help Letran students develop a deep sense of environmental responsibility.

Despite the Philippines' collective effort to integrate environmental awareness in basic education curriculum, there is a scarcity of research on the efficiency of these clubs in raising awareness of environmental issues and incorporating them into a wider curriculum. Existing studies have predominantly focused on waste management; however, there is still a lack of thorough research on how students view these clubs' contributions to environmental awareness and literacy.

This study aims to explore the impact of these clubs on students' environmental awareness. Specifically, it aims to identify ways of improving environmental awareness at Letran Manila. Moreover, concepts of knowledge, attitudes, and behavior and their relationships

can be addressed using the idea of environmental literacy, which may reflect on students as the study continues (Fang, 2020). Understanding the effectiveness of these clubs from the students' perspectives can help identify strengths, challenges, and opportunities for development in incorporating environmental issues into school activities.

#### Research Objectives

The study seeks to understand the perspectives of Senior High School students on the role of Science and Environmental clubs on their environmental awareness. Specifically, this study seeks to:

1. Determine the various activities and events handled by the different clubs designed to perform its roles in enhancing the environmental awareness of the students.
2. Understand Senior High School students' perspectives on the impact of Science and Environmental ACLE Clubs on their environmental awareness.
3. Identify ways of improving environmental awareness at Letran Manila based on the students' perspectives.

#### Statement of the Problem

This study aims to understand the different perceptions of the Senior High School students on the role of science and environmental ACLE clubs in enhancing their environmental awareness. Specifically, the study aims to answer the following questions:

1. What are the various activities and events handled by the different clubs designed to perform its roles in enhancing the environmental awareness of the students?
2. What are the perspectives of the students on the impact of Science and Environmental ACLE Clubs on their environmental awareness?
3. What are the ways to improve environmental awareness at Letran Manila based on the students' perspectives?

#### Scope and Limitations

The study aims to understand the different perspectives of Senior High School students on the role of Science and Environmental clubs on their environmental awareness. Furthermore, from the responses this study will gather, we will be able to pinpoint areas for enhancement for incorporating environmental awareness at Letran Manila. This study is limited to the Senior High School STEM students of Letran Manila who are current members of the Verdure Club, the Erudites Club, and the i-Volunteer Club.

### Conceptual Framework

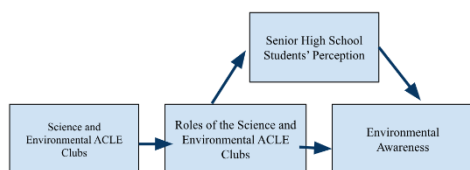


Figure 1. Conceptual Framework of the Study

This study follows a conceptual framework that visually shows the relationship between the science and environmental ACLE Clubs, their roles in environmental awareness. It also shows the interconnection of the perception of the Senior High School students between the relationship of the roles of the clubs with environmental awareness. As shown in the figure, the ACLE clubs are the primary influence in our study (independent variable), and environmental awareness is the dependent variable.

### Review of Related Literature

Several studies about environmental awareness have assessed the different roles of school environmental clubs on the knowledge, practices and behaviors, in terms of the students.

#### The Role of Environmental Clubs

Beach (2023) stated in the *Journal of Adolescent and Adult Literacy* that the teachers and students who are part of environmental clubs are able to engage in critical inquiry about various issues contributing to the overall well-being of our environment. The participants of Beach's study, both the club coordinators and student members, were able to show a thorough understanding of the interconnectedness of environmental issues such as energy/transportation, agriculture/food production and economic systems. They acquired knowledge about the issues surrounding these topics and used them in order to take actions and address the various concerns, such as taking part in planting community gardens and promoting the use of recycling to reduce the use of plastic wastes. This study offers a valuable insight into how environmental clubs play its role in enriching its members' critical thinking regarding these environmental issues, and their involvement in sustainability practices. This encourages the students to apply their knowledge in a practical way as it agrees to the idea that these clubs serve as a way for them to have a chance to learn through their experiences (experiential learning).

Apart from that, Huoponen (2025) conducted a study in an upper secondary school in Finland where it is mentioned how environment-focused clubs (Eco-clubs) promote the practice of pro-environmental behavior among its students. This study found out the perception of eco-club members where it is stated how these individuals greatly appreciate how these clubs support the environmental actions in their school, while incorporating a relaxing setting to look forward to other than regular schoolwork.

In a similar context, a journal article written by Kiss et. al (2024) presents a result that the participants of eco-clubs consider the community as a safe space where the exchange of knowledge, experiences and self-discovery motivates them to participate and reflect on their behaviors. These provide valuable insights that the peer-learning process that happens within these eco-clubs where the

discussion is linked in real-life situations encourages the participants to apply and keep their learnings in practical situations, thus enhancing their sustainable lifestyle practices. Moreover, it highlighted the "spill-over effect" where members start to share and spread their knowledge to their peers and families, showing how these clubs emphasize the environmental perceptions of its members and their ability to integrate these discoveries in broader societal contexts.

#### Environmental, Science, Technology, Engineering, and Maths (E-STEM education)

Koculu and Girgin (2022) found that E-STEM enhances students' knowledge of environmental problems such as pollution and sustainable agriculture. Their experiment with fifth-grade students indicated that an integration of STEM with environmental education boosts students' attitudes and capabilities towards engineering design activities. This integrated way enforces a better grip of environmental concerns, furthering the practical problem relevance of STEM education.

The study of Tuazon et al. in 2024 showed how environmental education impacts the institutional practice in responding to a particular environmental issue and fostering sustainable development. It underscores the capability and limitation of environmental education as an institutional framework, highlighting a balanced approach of strengthening resilience while enhancing a strong relationship between society and the environment. Environmental education is an effective educational strategy for developing the attitudes, knowledge, and skills required to tackle environmental challenges, but it also unmasks areas of empowerment and vulnerability in the pursuit of sustainability. This paper explores the way environmental education affects institutional actions for tackling precise environmental challenges and attaining sustainable development. Utilizing a semi-systematic literature review, the study integrates themes across different studies to assess strengths and weaknesses of environmental education in institutional contexts. Outcomes reveal that environmental education strengthens institutions to undertake long-term sustainable practices, building environmental awareness, incorporating indigenous knowledge, and fostering academic and community engagement in global environment efforts. The discoveries have laid the ground for enhancing environmental education's contribution to sustainable development, scientific advancement, as well as stimulating creative solutions to the issues of the environment.

#### Environmental Education, Literacy, and Issue Integration

The context of environmental education is important because it encompasses the attitude and knowledge of the learners towards the environment issues and practices. Many studies have explored students' environmental awareness, concern, knowledge, attitude, and learning systems to enhance effective environmental education that nurtures ecological concern and responsibility.

A person's environmental literacy and systematic activity form an integration that can be described as ecological understanding. Evidence indicates that learners, as a whole, have inadequate background knowledge for them to function in the society as responsible citizens who can deal with environmental issues (Smith et al., 2020). This is also the case with studies done with pupils in Kazakhstan where school children's environmental awareness and knowledge is grossly inadequate which points to deficient environmental education teaching and learning processes. Johnson and Lee's (2020) research finding concurs with other works that claim lack of environmental knowledge does not equate to lack of awareness of such issues amongst learners which was found to be the case for students' environmental awareness.

Attitude toward the environment is how an individual's thoughts and feelings are connected to the natural world. Research in psychology has demonstrated that learners can exhibit a relatively sound environmental attitude, even in the absence of deep environmental understanding (Davis & Miller, 2020). This feature has also been observed among the Kazakhstan senior pupils who apparently knew almost nothing about the environment but still had an environmentally friendly attitude. The same studies in other areas suggest that learners appreciate the environment, even when there is little emphasis on environmental education (Anderson, 2020).

Different groups from across the globe have different interests and issues with the environment. Research studies also suggest that learners tend to see air pollution, water pollution, and natural calamities as issues they care about most (White & Brown, 2020). Students in Kazakhstan expressed the greatest concern about floods, pollution of rivers and seas, and the air, while showing lesser concern about problems of overpopulation, radioactive waste, the extinction of species, and climate change (Garcia, 2020). These findings support other studies which show that learners tend to focus more on local environmental issues than global ones (Taylor, 2020).

## METHODOLOGY

### Research Design

The researchers applied a qualitative case study design in which, as defined by Creswell (2014) cited by an article of BINUS University (2024), *"is a qualitative research method that provides an in-depth examination of a single entity (e.g., an organization, program, event, or individual) within its real-world context."* This study aims to gather detailed insights through open-ended questions and interviews—which allowed the participants to share their personal experiences and perspectives freely. Analyzing the collected data revealed the contributions of these clubs towards environmental awareness, the effectiveness of their programs, and any challenges in implementation. By concentrating on the qualitative aspects of students' experiences and viewpoints, this approach offered a well-rounded understanding of how ACLE clubs shape students' learning and actions, providing essential insights for improving environmental awareness initiatives at Letran Manila. This comprehensive analysis will help pinpoint strengths, identify areas for enhancement, and opportunities for further integrating environmental issues into school activities.

### Sampling Method and Participants

The researchers used purposive sampling, a non-probability sampling technique, to select interview participants who possess specific knowledge and experiences relevant to the study's focus, ensuring rich and detailed data collection (Nikolopoulou, 2022). This sampling technique enabled the researchers to purposefully select participants who are most likely to give rich and detailed information regarding the focus of the study.

The study took place at Colegio de San Juan de Letran Manila. The locale allows both participants and researchers to engage in meaningful discussion about matters that will be addressed. More so, Letran Manila is an ideal location since it is known to have active co-curricular organizations, and it provides a comfortable environment where students participate in various environmental activities. Participants consists of Senior High School STEM students from Letran Manila who are current and active members of the Verdure Club, the Erudites Club, and the i-Volunteer Club. The researchers selected two students from the I-Volunteer Club, three students from the Verdure Club, and one from the Erudites Club to participate in the open-ended focus group discussion to have a diverse and

representative sample that provided valuable insights into their experiences and perspectives on environmental awareness within their clubs.

The researchers selected three students from the Verdure Club, two from the i-Volunteer Club, and one from the Erudites Club to participate in the focus group discussion in order to achieve a diverse and representative answers. This sampling was purposeful and represented the different level of engagement that each club had in raising awareness of environmental issues. The Verdure Club, which is the most engaged in environmental projects and activities, was given more representation to get in-depth and experience-based insights. On the other hand, due to the Erudites Club's limited involvement in environmental awareness, just one member was chosen from among them. Moreover, only a small number of Erudites members were willing and able to attend the FGD.

### Research Instruments

Krueger (1994) and Morgan (1996) defined Focus Group Discussion (FGD) as a qualitative research method by which data are collected from a small number of participants through organized and subjective discussion. This methodology is suitable for this study as it provides an in-depth knowledge on the experiences of Science and Environmental ACLE clubs in environmental awareness, perspectives, and challenges their members face while being a member of their club. Through open-ended discussions, this study seeks to explore how these clubs impact students' environmental knowledge and attitudes as well behaviors. The FGD helped identify the potential improvements in integrating environmental awareness into student activities at Letran Manila.

### Data Collection Procedure

Focus Group Discussions (FGDs) were the method the researchers used to collect data. This approach was selected because it promotes an open dialogue in which the chosen participants are free to share their own ideas, opinions, and reflections in a conversational environment. FGDs, unlike structured questionnaires, permit more detailed discussions, where students could react to other people's ideas and generate a more substantial interaction.

The researchers believe this method aligns well with the study's goal of understanding students' perspectives on the role of Science and Environmental ACLE clubs. Through guided conversations, students are expected to express not only what they know, but also how they feel about their involvement in environmental awareness and what improvements they think can be made. The following steps will guide the data collection process:

**Participant Selection** – The researchers used purposive sampling to select six STEM students from Colegio de San Juan de Letran Manila. Three students will be chosen from Verdure Club; two students will be chosen from i-Volunteer; and one student from Erudites Club.

**Scheduling and Consent** – Prior to the FGD, the researchers informed the respondents about the purpose of the study, the way data will be utilized, and the importance of confidentiality. The respondents are required to sign a consent form indicating that they are aware and agree to participate voluntarily in the discussion.

**Discussion Session** – The FGD were conducted by the researchers via Google Meet to accommodate participants remotely while ensuring a focused and comfortable discussion. The discussion followed a guide of open-ended questions related to club activities, environmental learning experiences, and potential improvements. The session ran for about 45 to 60 minutes.

**Documentation** – With the participants' permission, the researchers audio-recorded the discussion for accuracy. Notes are also taken to capture important points, group dynamics, and non-verbal cues.

**Transcription and Analysis** – Following the FGD, the researchers transcribed the recording and start analyzing the data by pinpointing the recurring themes, patterns, and individual insights pertaining to environmental awareness in the clubs.

**Confidentiality and Ethics** – Personal information were kept confidential. Pseudonyms are employed when reporting data to conceal participants' identities. Participants were assured that their answers would be kept completely private and used only for scholarly and research purposes. Throughout the whole research procedure, their privacy and well-being were respected.

By using FGDs, the researchers aim to gather authentic, detailed insights into how ACLE clubs influence students' awareness, behavior, and commitment to environmental issues.

## RESULTS AND DISCUSSION

### Summary of the Results and Discussion

The study found that Colegio de San Juan de Letran Manila's Science and Environmental ACLE groups significantly increased students' environmental consciousness through the different clubs in the school. The first research objectives revealed that clubs planned advocacy events. Which includes clean-up drives and sustainability campaigns and actively involved students in environmental outreach, which aligns itself with global environmental engagement. The second objective showed that involvement in clubs enhanced their comprehension of environmental issues on a local and worldwide scale. More so, vital life skills like leadership, responsibility, and volunteerism were also exhibited in students' holistic development. The participants suggested ways to improve the third objectives, such as improved organization and enhanced club structure. Overall, the findings suggest that ACLE clubs contribute positively to the students' environmental awareness and growth.

### Findings

**Research Objective 1.** Determine the various activities and events handled by the different clubs designed to perform its roles in enhancing the environmental awareness of the students.

#### Community Outreach and Collaborative Initiatives

*"Ayun, nabanggit rin naman ni [respondent 1] yung coastal clean-up... outreach program namin kasi sa ganitong way naipapakita namin yung kahalagahan ng pagiging responsible sa kalikasan habang tumutulong rin sa community."* – R2

Environmental awareness in clubs extended beyond school activities and reached local communities (Adams, 2021). Many students highlighted how their participation in outreach programs strengthened their understanding of sustainability while reinforcing the importance of collaborative effort.

Through events such as tree planting and beach cleanups, ACLE clubs encouraged students to become active contributors to their community, which builds stronger relationships between youth and environmental organizations (Beach, 2023). Respondents emphasized that these initiatives allowed them to see the bigger picture—environmental responsibility is not an individual pursuit but a collective effort.

#### Environmental Advocacy through Organized Events

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*"Uh yung samin naman is yung mga clean-up drive namin like yung Echo Warrior in Action ganon yung Greenhouse in Full Bloom. Celebrating Human Month with the cause. Cycling for a cost and the yung recently yung Plant Play Protect."* – R3

G. Elsamanoudy (2024) Structured events serve as an essential part of environmental clubs, raising awareness and inspiring student participation. Many respondents shared how organized initiatives, ranging from clean-up drives to educational campaigns, helped reinforce sustainability principles.

Programs such as "Plant Play Protect" and "Echo Warrior in Action" not only promoted environmental cleanliness but also educated students on responsible waste disposal and conservation methods. Events related to Human Month, cycling programs, and greenhouse projects introduced innovative approaches to engaging students in sustainability discussions.

The visibility of these initiatives encouraged broader participation. Several students noted that witnessing peers and club leaders involved in environmental advocacy motivated them to take part, illustrating the role of well-organized projects in enhancing awareness

**Research Objective 2.** Understand Senior High School students' perspectives on the impact of Science and Environmental ACLE Clubs on their environmental awareness.

#### Environmental Awareness through Club Activities

*"For me, for being in this. And very direct clubs help me with different environmental issues na hindi naman ako aware before kasi sa Verdure po tinuturuan po nila kami na mga actions po natin sa person minsan directly po nakaka-affect sa nature."* – R3

Environmental awareness is most effective when it moves beyond theory into real-world understanding, and for many respondents, their ACLE club experiences played a vital role in this. Students shared how their awareness of environmental issues significantly deepened after participating in clean-up drives, nature-based events, and sustainability campaigns. Through firsthand experiences, they saw the direct link between individual actions and environmental outcomes, especially in local contexts like Arroceros Park or Baseco Beach. These insights did not just stay personal—students reported how these events influenced their peers and communities to become more conscious and proactive.

The global perspective also emerged strongly, especially through activities such as the international coastal cleanup. Several students reflected on how such initiatives helped them understand that environmental problems are not confined to the Philippines; they are part of a much larger, interconnected struggle. This awareness encouraged them to think beyond local impacts and view their participation as part of a broader movement. Their natural interest in nature (e.g., from farming family backgrounds or a love for plants) also served as a personal gateway into deeper ecological understanding.

This finding supports the ideas of Smith (2020), who emphasized that the participation of students in environmental clubs encourages them to develop ecocentric values and a deeper awareness of their responsibility toward the environment.

#### Personal Growth from Volunteer Involvement

*"Nakatulong rin 'to sa akin kasi mas mapa-igting p*

*niya yung passion ko sa pag-volunteer at mas na-develop niya pa yung social responsibility ko.” – R1*

Beyond environmental awareness, Science and Environmental ACLE clubs contributed to students' personal development. Many reported that they gained essential life skills such as communication, leadership, time management, and a heightened sense of responsibility (Duda, 2025). These skills were not learned in isolation but through organizing events, collaborating with others, and engaging in outreach programs. The clubs, therefore, served as important developmental spaces where values taught inside the classroom—like service and responsibility—were practiced and embodied.

Students also shared how their passion for community service deepened through the clubs. By engaging in meaningful work, they experienced a sense of fulfillment that motivated them to continue giving back. The emotional rewards of volunteering, like joy and purpose, reinforced the positive impact of their involvement. For many, these moments transformed their idea of education into something more holistic—where growing as a person was just as important as academic success.

Research Objective 3. Identify ways of improving environmental awareness at Letran Manila based on the students' perspectives.

#### Proposed Solutions for Club Improvement

*“Siguro ano, pwede kaming gumawa ng mga creative activities na patungkol sa environmental like eco-friendly games or contest na related sa recycling and we can collaborate with other ACLE like Verdure...” – R2*

In response to the challenges they faced, students proposed several creative and feasible solutions. These included rotating schedules for participation, introducing fun and competitive eco-friendly activities, and strengthening collaboration between clubs. The goal of these suggestions was not only to boost participation but to make environmental awareness more engaging and relatable. By tailoring events to students' interests, clubs could foster deeper involvement while still meeting their educational goals.

Some also emphasized the importance of better planning and communication. Clubs that established clear, attainable goals had a higher chance of maintaining momentum and producing noticeable outcomes (Ronald et. al, 2024). By organizing event outlines in advance and making schedules more consistent, students believed more members could be involved. Another recurring idea was to improve the club experience by investing in adviser support and leadership training. These practical, student-driven ideas reveal that learners are not only aware of what's lacking, but they are also eager to co-create solutions that make clubs more effective, inclusive, and impactful.

#### Strengthening Club Structure and Management

*“Uhh, siguro hindi talaga one man job yung uhh pag sosolve ng mga ganitong challenge, specially uhh sa mga clubs natin. Uhh, community tayo na may sariling mga missions and for now siguro wala talaga concrete plan yung Erudite para ma-address yung mga ganitong challenge, specially ayun nga hindi kami nahahandle ng maayos and uhm hindi rin gaano kadalas yung mga meetings namin and yung pag aasikaso sa mga projects namin kaya ayun wala masyado na-implement para masolve yung ganitong conflicts.” – R6*  
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One of the biggest challenges in improving environmental awareness within clubs is the lack of structure and management. As highlighted by a respondent from Erudite, clubs function as communities with specific goals, yet without clear direction or planning, they struggle to fulfill their missions. A major issue raised by students is the absence of consistent leadership and adviser support. Some clubs, including Erudite, experience irregular meetings and poor organization, making it difficult to implement environmental projects effectively. In relevance with the findings of Kiss et. al (2024), these eco-clubs must be a place for its members to engage with each other through these activities. But without a solid management system, activities become inconsistent, and members feel disconnected, leading to reduced participation and enthusiasm.

Another challenge is the lack of actionable plans to address these management issues. As the respondent pointed out, there is currently no concrete strategy in place to resolve conflicts within their club. This results in missed opportunities for members to engage in meaningful environmental awareness activities.

#### CONCLUSION

The study, “Perceptions of Senior High school Students on the Role of Science and Environmental ACLE Clubs in enhancing Environmental Awareness” seeks to explore, analyze, and interpret the perceptions of Senior High School STEM students on the role of Science and Environmental ACLE clubs in enhancing environmental awareness at Colegio de San Juan de Letran - Manila. Through Focus Group Discussion (FGD), the study examined students' awareness of club activities, their perceived impact, and recommendations for improving environmental awareness within the colegio. From the data collected, the following findings have been made.

ACLE clubs contribute significantly to the personal development of students. Students shared that their involvement in environmental clubs not only enhanced their knowledge of ecological issues but also developed their leadership, communication, time management, and teamwork skills. These experiences helped shape their sense of responsibility, both as individuals and as members of a community, fostering a deeper connection between academic learning and real-world application.

Outreach programs and organized events play a crucial role in raising environmental awareness. Participation in community-based projects such as coastal cleanups, tree planting, and environmental campaigns helped students connect classroom knowledge with real-life environmental concerns. These activities also encouraged collaboration with other institutions, showing students that environmental advocacy is most effective when approached as a shared responsibility.

Despite their benefits, ACLE clubs face internal challenges that hinder their effectiveness. While students appreciate the opportunities provided by Science and Environmental clubs, many have pointed out issues such as inconsistent meetings, limited member participation, and lack of proper club management. These structural weaknesses prevent some clubs from fully achieving their goals, highlighting the need for stronger leadership, better planning, and more consistent adviser support to maximize their impact on the awareness of the students.

Respondents proposed several recommendations to enhance club operations. These include refining leadership structures, fostering

inter-club collaboration, and implementing strategic scheduling to accommodate student availability. Many suggested creating more engaging activities such as eco-friendly competitions, recycling initiatives, and integrated science projects to sustain interest and boost participation. Addressing these concerns may lead to more effective and impactful environmental awareness programs at Letran Manila.

Only sustainability claims have a significant impact on consumer satisfaction with sustainable packaging among Letran Manila senior high school students. The factors of social norms and personal values, package design, and price did not influence satisfaction, as indicated by their high p-values. However, sustainability claims, with a t-value of 3.979 and a p-value of less than 0.001, were found to significantly affect satisfaction. This supports the idea that consumers value brands that promote environmental sustainability, making sustainability claims a key factor in improving consumer satisfaction.

## RECOMMENDATIONS

From the findings and conclusions extracted by this study, the researchers respectfully recommend the following actions to the following individuals:

**For the Students** - Students are urged to get involved in ACLE clubs and start environmental initiatives that highlight their interests as well as more general environmental concerns. By utilizing the different resources available, it may influence other students to foster an environmentally friendly school. Students should also take leadership in proposing and planning creative, inclusive activities that promote environmental responsibility beyond school premises.

**For the Science and Environmental ACLE Clubs** - Clubs should implement structured, year-round programs that rotate member participation and incorporate a variety of engaging and hands-on activities like collaborative drives and inter-club initiatives. This is to ensure that all the members of clubs will be able to participate in different club initiatives. The researchers also suggest making efforts to evaluate member feedback regularly to keep activities meaningful and relevant.

**For the Club Advisers** - Advisers must take a proactive role in planning and monitoring club operations. Additionally, advisers should undergo periodic training on environmental awareness and student-led program facilitation to effectively support their clubs' missions. Establishing their knowledge on certain topics regarding the environment will be useful in the holistic development of the club members.

**For the Institution (Colegio de San Juan de Letran Manila)** - The institution should support ACLE clubs with sufficient resources and logistical support. Strengthening the institutional foundation for environmental literacy will foster a more consistent and impactful approach to environmental awareness. Institutional partnerships with government agencies, NGOs, and environmental professionals should also be included to expand the reach of the clubs' goals.

**For Future Researchers** - Researchers should also consider a longitudinal approach to examine long-term behavior changes and the sustainability of club initiatives. Exploring the effectiveness of digital tools or virtual platforms in enhancing environmental awareness could also be a relevant approach, especially in urban academic settings. In which the future researchers can understand the different approaches needed to pursue students' environmental awareness.

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