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Awareness and Implementation of the YES-O Program

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ABSTRACT

This study evaluated the role of the Youth for Environment in Schools Organization (YES-O) as a strategic intervention in strengthening school-based environmental programs and fostering ecological stewardship among learners. Specifically, it determined learners' awareness and implementation levels of YES-O activities, compared differences across schools of varying sizes, and examined the relationship between awareness and implementation. The respondents were 395 Junior High School students from the Fourth Congressional District of Camarines Sur, selected through a multi-stage sampling technique to ensure representation across schools of different sizes. The research employed a descriptive-comparative correlational design. The descriptive component provided a clear account of awareness and implementation levels, the comparative aspect identified differences across school sizes, and the correlational design explored associations between awareness and implementation without implying causation. Data were gathered using survey instruments, and statistical treatments included Weighted Mean for central tendency, One-Way ANOVA for group differences, and Pearson Product-Moment Correlation Coefficient for relationships. The Modified ADDIE Model guided the development of Strategic Intervention Materials (SIMs). Findings revealed high awareness (mean = 4.11) and implementation (mean = 4.15) of YES-O programs. Significant differences were observed across program aspects, though none among respondent groups. A strong positive correlation ($r = 0.903$, $p = 0.035$) confirmed that higher awareness was linked to stronger implementation. Based on these results, three SIMs, Electricity, Typhoon, and Ionic/Covalent Compounds, were developed to integrate environmental education into science curricula. The study concludes that YES-O can transform schools into eco-hubs, empowering learners as proactive changemakers while embedding sustainability into both curricular priorities and lived practices.

Keywords: YES-O, environmental education, strategic intervention, program implementation, and learners' awareness.

INTRODUCTION

Schools face urgent environmental challenges, particularly water conservation, waste management, and resource limitations. Globally, waste generation is projected to reach 3.8 billion tons by 2050, costing USD 640.3 billion if unaddressed (UNEP, 2024). In the Philippines, 2.7 million tons of plastic waste pollute oceans annually (World Bank, 2021), while deforestation drives CO_2 emissions and resource inequity (Bonzo et al., 2025). To respond, DepEd institutionalized the Youth for Environment in Schools

Organization (YES-O) through DepEd Order No. 72, s. 2003, supported by RA 9512 and subsequent orders. YES-O promotes ecological awareness, waste management, and student leadership, aligning with SDGs. Literature affirms its role in fostering environmental literacy and science learning (Saldana & Domanog, 2024; Perez, 2019), but highlights weaknesses in monitoring and sustainability planning (Perez, 2019; Cadiz & Cortez, 2025). Recent studies show awareness must be paired with attitudes, institutional support, and experiential practices to ensure consistent implementation (Pacificar, 2024; Carale et al., 2025; Natingga & Pelobello, 2025). The present study addresses these gaps by examining awareness and implementation levels of YES-O in Camarines Sur schools and introducing Strategic Intervention Materials (SIMs) to integrate environmental education into science learning. Ultimately, YES-O is positioned as a strategic intervention to transform schools into eco-hubs and empower learners as proactive changemakers for sustainability.

Research Objectives

This study assessed learners' awareness and implementation of the Youth for Environment in Schools Organization (YES-O) programs in the Fourth Congressional District of Camarines Sur as the basis for developing Strategic Intervention Materials (SIMs). Specifically, it measured awareness and implementation levels across greening programs, environmental advocacy, resource conservation, clean-up drives, and solid waste management; examined differences among aspects and school groups; and tested the relationship between awareness and implementation. Findings guided the creation of SIMs to strengthen ecological responsibility and embed sustainability into science learning.

METHODOLOGY

This study employed a descriptive–comparative–correlational design to assess learners' awareness and implementation of YES-O programs in Camarines Sur. A total of 395 Junior High School students were selected through multi-stage sampling across small, medium, large, and very large schools. Data were gathered using a validated self-made questionnaire, divided into awareness and implementation sections, each rated on a 5-point scale.

Awareness Scale:

Weight	Scale Interval	Interpretation
5	4.21-5.00	Very Much Aware (VMA)
4	3.41-4.20	Much Aware (MA)
3	2.61-3.40	Fairly Aware (FA)
2	1.81-2.60	Less Aware (LA)
1	1.00-1.80	Least Aware (LtA)

Implementation Scale:

Scale	Interval	Interpretation
5	4.21–5.00	Very Highly Implemented (VHI)
4	3.41–4.20	Highly Implemented (HI)
3	2.61–3.40	Fairly Implemented (FI)
2	1.81–2.60	Less Implemented (LI)
1	1.00–1.80	Least Implemented (LtI)

Unstructured interviews with teachers, students, and stakeholders supplemented survey data. Ethical safeguards included informed consent, confidentiality, and voluntary participation. Data analysis employed weighted mean to measure levels, Pearson correlation to test relationships, and one-way ANOVA to identify group differences. This methodology ensured validity and reliability, supporting evidence-based recommendations and the development of Strategic Intervention Materials (SIMs) to strengthen environmental education and sustainability in schools.

RESULTS AND DISCUSSION

Level of Learners' Awareness of YES-O Program. The learners' awareness of YES-O programs in Camarines Sur focused on greening, advocacy, conservation, clean-up drives, and solid waste management. Results showed the highest awareness in environmental integration advocacy and clean-up drives (AWM = 4.30, "Very Much Aware"), followed by solid waste management (AWM = 4.16), conservation of resources (AWM = 3.99), and greening programs (AWM = 3.78), all interpreted as "Much Aware." The overall mean of 4.11 indicated learners were "Much Aware" of YES-O initiatives. Findings suggest awareness is strongest in structured, routine, and highly visible activities, while programs requiring sustained resources, such as greening, lag. This highlights the need for institutional support and community collaboration to balance routine practices with long-term ecological initiatives. The results align with global studies emphasizing education, advocacy, and youth engagement as drivers of sustainability, while theories such as Hobfoll's Conservation of Resources (2012) explain the importance of resource investment in sustaining ecological responsibility.

Table 1
Learners' Awareness Level on YES-O Programs

Programs	AWM	Int.
Environmental Integration Educational Advocacy	4.30	VMA
Clean-Up Drives	4.30	VMA
Ecological Solid Waste Management	4.16	MA
Conservation of Resources	3.99	MA
Greening Programs	3.78	MA
Overall Average Weighted Mean	4.11	MA
Interpretation		Much Aware

Note. AWM = Average Weighted Mean; Int. = Interpretation. Scale intervals: 4.21–5.00 = Very Much Aware (VMA); 3.41–4.20 = Much Aware (MA); 2.61–3.40 = Fairly Aware (FA); 1.81–2.60 = Less Aware (LA); 1.00–1.80 = Least Aware (LtA).

Implementation of the YES-O Programs. The results showed that environmental integration advocacy (AWM = 4.32) and clean-up drives (AWM = 4.25) were "very highly implemented," while solid waste management (AWM = 4.19), conservation of resources (AWM = 4.13), and greening programs (AWM = 3.84) were "highly implemented." The overall mean of 4.15 indicated that YES-O programs were "highly implemented. This meant that schools excel in structured, routine, and awareness-driven initiatives, such as advocacy and clean-up drives, but face challenges in sustaining resource-intensive programs like

greening. This highlights the need for stronger institutional support, funding, and partnerships to ensure long-term sustainability. Global studies (Vyas et al., 2022; Nakhaee, 2020; Schusler & Krasny, 2020) affirm that education and youth engagement drive ecological responsibility, while gaps identified by Amran et al. (2019) and Abdullah et al. (2017) emphasize the importance of structured practice beyond awareness. Schwartz's Norm Activation Theory (1977), expanded by Cheng et al. (2022), further explains YES-O's success by linking awareness and responsibility to ethical ecological behavior.

Table 2
Summary of Implementation Levels of YES-O Programs

YES-O Programs	AWM	Int.
Environmental Integration Educational Advocacy	4.32	VHI
Clean-Up Drives	4.25	VHI
Ecological Solid Waste Management	4.19	HI
Conservation of Resources	4.13	HI
Greening Programs	3.84	HI
Overall Mean	4.15	
Interpretation		Highly Implemented

Note. AWM = Average Weighted Mean; Int. = Interpretation. Scale intervals: 4.21–5.00 = Very Highly Implemented (VHI); 3.41–4.20 = Highly Implemented (HI); 2.61–3.40 = Fairly Implemented (FI); 1.81–2.60 = Less Implemented (LI); 1.00–1.80 = Least Implemented (LtI).

Significant Difference in the Level of Awareness of Learners On YES-O Programs Among Aspects and Groups. The learners' awareness of YES-O programs varied significantly across different aspects and groups. A one-way ANOVA revealed a statistically significant difference ($F = 5.059$, $p = .005551$), indicating that awareness levels were not uniform. Programs such as advocacy and clean-up drives showed stronger recognition, while greening and conservation initiatives were less emphasized. These indicate that awareness is shaped by program visibility and social reinforcement, highlighting the need for targeted strategies to strengthen weaker areas. The results align with Punzalan (2020) and are further explained by Norm Activation Theory, which emphasizes that collective, socially reinforced activities more effectively activate moral responsibility than less visible initiatives. The programs generate uneven awareness across components, excelling in visible, routine activities but requiring stronger institutional support and reinforcement for long-term initiatives like greening and conservation. This underscores the importance of differentiated strategies to foster balanced, comprehensive ecological awareness among learners.

Table 3 Significant Difference in the Level of Awareness of Learners on YES-O Programs Among Aspects

Source	SS	Df	MS	F	P-value
Between-treatments	1.0102	4	0.2526	5.05918	0.005551
Within-treatments	0.9984	20	0.0499		
Total	2.0086	24			

Note. One-way ANOVA results show F = 5.05918, p = .005551, significant at p < .05.

Differences in the Implementation Among Aspects. The differences in the implementation of YES-O programs across aspects using one-way ANOVA revealed the results in Table 5A, a statistically significant difference (F = 7.76958, p = .0006), confirming that implementation is uneven across program components. Clean-up drives and advocacy were more consistently and visibly implemented, while greening and conservation programs lagged, reflecting disparities shaped by institutional priorities, resource allocation, and community involvement. This implies that YES-O strategies cannot be generalized; targeted reinforcement is needed to strengthen weaker components while sustaining stronger ones. Supporting studies (Madrigal & Oracion, 2017; Her et al., 2016; Rizavi et al., 2025) similarly highlight variability in environmental practices across contexts, reinforcing that outcomes depend on demographic, systemic, and resource factors. The Conservation of Resources (COR) Theory further explains that learners and institutions prioritize practices that visibly safeguard resources, leading to uneven implementation. Overall, the results underscore the need for structured mechanisms and resource-focused strategies to balance program delivery and achieve comprehensive ecological responsibility. The implementation varies significantly across aspects, with advocacy and clean-up drives emphasized more strongly than greening and conservation. Addressing these disparities through targeted reinforcement and institutional support is essential to ensure balanced and sustainable program outcomes

Table 4

Significant Difference in the Level of Implementation of the YES-O Programs Among Aspects

Source	SS	Df	MS	F	P-value
Between-treatments	0.7089	4	0.1772	7.76958	0.0006
Within-treatments	0.4562	20	0.0228		
Total	1.1651	24			

Note. One-way ANOVA results show F = 7.76958, p = .0006, significant at p < .05.

Significant Differences in the Implementation Levels of YES-O Programs among Respondents. Significant differences exist in the implementation levels of YES-O programs among respondents using one-way ANOVA. Results in Table 5 showed an F-statistic of 1.7575 with p = 0.18, which is above the threshold for statistical significance. This indicates that while some variability is present, implementation levels across program aspects are relatively uniform. Learners perceive the delivery of YES-O initiatives as consistent, with no single component disproportionately emphasized or neglected. These imply that schools are implementing YES-O programs in a balanced manner, though opportunities remain to enhance overall quality and visibility. Rather than addressing major disparities, strategies should focus on reinforcing all components to ensure meaningful contributions to ecological literacy. These results align with Galorio and Naling (2024) and Nuñez & Llenaresas (2021), who reported consistent practices in environmental education, while contrasting with contexts where differences emerge by academic track (Danielraja, 2019). The Consciousness–Behavior–Environment (CBE) Alignment Theory further supports the findings, showing that when awareness, ecological actions, and school/community contexts are harmonized, programs achieve uniformity. The implementation among respondents is relatively uniform, with no statistically significant differences across aspects. This consistency reflects effective program

dissemination, though reinforcement is needed to elevate practices and sustain long-term ecological responsibility.

Table 5
Significant Difference in the Level of Implementation of the YES-O Programs Among Respondents

Source	df	SS	MS	F	P-value
Between Groups	4	0.5653	0.1413	1.7575	0.18
Within Groups	15	1.2065	0.0804		
Total	19	1.7718			

Note. Tab Crit (4,15) = 3.06. Since F (1.7575) < Critical Value, the null hypothesis is not rejected.

Relationship between Learners' Awareness and Implementation of YES-O. The relationship between learners' awareness and implementation of YES-O programs across components such as greening, advocacy, conservation, clean-up drives, and solid waste management. Results showed in Table 6 revealed very high correlations in most aspects, with significant relationships observed between Greening and Conservation of Resources (r = 0.949, p = 0.014), Environmental Integration Advocacy and Solid Waste Management (r = 0.969, p = 0.006), Clean-Up Drives and Greening (r = 0.911, p = 0.031), and Solid Waste Management with Clean-Up Drives (r = 0.975, p = 0.005).

Table 6
Relationship Between the Level of Awareness and the Extent of Implementation of the YES-O Programs

Aspects	r	Int	p-value	Significance
Greening Program – Conservation	0.949	Very High	0.014	Significant
Greening Program – Greening	0.917	Very High	0.028	Significant
Environmental Advocacy – Advocacy	0.976	Very High	0.004	Significant
Environmental Advocacy – Solid Waste	0.969	Very High	0.006	Significant
Conservation – Advocacy	0.950	Very High	0.013	Significant
Conservation – Conservation	0.954	Very High	0.012	Significant
Conservation – Clean-Up Drives	0.890	Very High	0.043	Significant
Clean-Up Drives – Greening	0.911	Very High	0.031	Significant
Clean-Up Drives – Clean-Up Drives	0.960	Very High	0.009	Significant
Solid Waste – Greening	0.940	Very High	0.018	Significant
Solid Waste – Advocacy	0.957	Very High	0.011	Significant
Solid Waste – Clean-Up Drives	0.975	Very High	0.005	Significant
Solid Waste – Solid Waste	0.948	Very High	0.014	Significant

Note. r = correlation coefficient; Int = interpretation; S = significant; NS = not significant.

Other correlations, though high, were not statistically significant, indicating that awareness does not always translate into consistent implementation. These suggest that YES-O programs foster strong alignment between knowledge and practice, particularly in visible and tangible activities. However, gaps remain where awareness is high but implementation lags, often due to resource limitations or institutional priorities. This underscores the need for reinforcement strategies to ensure awareness consistently leads to ecological action. Supporting studies (Chun & Guldmann, 2018; Calderon-Argelich et al., 2023; Otto & Pensini, 2017; Balunde et al., 2019) confirm that values, identity, and contextual factors shape pro-environmental behaviors. Ecological Theory further explains that structured school environments create "behavior settings" that sustain ecological responsibility, ensuring awareness translates into practice. The awareness and implementation of YES-O programs are highly correlated, particularly in core components, but some areas show gaps where awareness does not fully translate into practice. This highlights the importance of structured reinforcement, stakeholder collaboration, and resource support to sustain consistent ecological responsibility across all program aspects.

Relationship between learners' awareness and implementation of YES-O. This study examined the relationship between learners' awareness and implementation of YES-O programs. Results (Table 6B) revealed a very high correlation ($r = 0.903$, $p = 0.036$), confirming a statistically significant link between awareness and implementation. This indicates that when students are highly aware of environmental initiatives, they are more likely to actively engage in program components such as greening, clean-up drives, and solid waste management. The findings imply that YES-O programs effectively foster ecological responsibility by ensuring awareness translates into consistent practice. Strengthening awareness campaigns directly enhances implementation, while gaps in practice can be addressed by reinforcing knowledge and structured engagement. Supporting studies (Natingga & Pelobello, 2025; Saldana & Domanog, 2024; Etim et al., 2024; Cadiz & Cortez, 2024) confirm that awareness strongly drives participation and ecological behavior, though effectiveness depends on values, resources, and program support. The Consciousness–Behavior–Environment (CBE) Alignment Theory further explains that when awareness, behavior, and school/community context are harmonized, ecological responsibility is consistently sustained. YES-O programs demonstrate that strong awareness directly drives ecological implementation, confirming the effectiveness of structured environmental education in translating knowledge into sustained ecological action.

Table 7
Relationship Between Awareness and Implementation of YES-O Programs

Variable Pair	r	Interpretation	p-value	Significance
Awareness–Implementation	0.903076	Very High	0.035733	Significant

Note. Null hypothesis rejected; awareness and implementation are significantly correlated at $p < .05$.

Strategic Intervention Materials (SIMs) for Science 8 and 9. This study presents the development of Strategic Intervention Materials (SIMs) for Science 8 and 9 using the Analysis–Design–Development (ADDIE) model. The framework ensures SIMs are learner-centered, aligned with DepEd standards, and responsive to ecological education needs. Three SIMs were created: Electricity, Typhoon, and Ionic/Covalent Compounds—integrating environmental themes to strengthen mastery of least-learned

competencies while fostering ecological responsibility. The Analysis Phase identified gaps in learner competencies, limited contextualized materials, and challenges in embedding sustainability. The Design Phase structured SIMs into essential components (Title, Guide, Activity, Answer, Enrichment, Rubric, Reference, Author's Note) with objectives emphasizing mastery, ecological literacy, and differentiated instruction. The Development Phase produced clear, engaging, and interactive materials, refined through pilot testing and feedback to ensure effectiveness. In summary, the ADDIE-based SIM framework provides a structured approach to bridging science competency gaps while embedding environmental education. These SIMs empower students to become academically proficient and environmentally responsible, cultivating ecological stewardship and sustainable practices in schools.

Conclusions. Learners showed high awareness of YES-O, strongest in advocacy and clean-up drives. Implementation was strong, with schools prioritizing advocacy and curriculum integration. Awareness differed across program aspects but not among respondents. Implementation varied across aspects but was consistent among respondents. Awareness and implementation were strongly correlated, confirming that higher awareness drives active ecological practices.

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