

From Participation to Transformation: Lived Experiences of Faculty and Staff in a Coastal Clean-Up Initiative

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ABSTRACT

This qualitative phenomenological study determined the lived experiences of Marine Transportation faculty and staff who participated in a coastal clean-up drive under the SAILORS Program of a university. Anchored in Transformative Learning Theory and experiential learning frameworks, the study explored participants' reflections on the relevance, effectiveness, and level of participation in the activity, as well as its influence on their environmental attitudes and professional development. Data were gathered from fourteen purposively selected faculty members and analyzed thematically. Findings revealed that the coastal clean-up drive effectively linked maritime theory with real-world environmental practice, strengthened environmental stewardship and ecological responsibility, and reinforced core maritime values, including discipline, teamwork, and social responsibility. Participants also reported increased awareness of global maritime environmental standards, including MARPOL, and developed a stronger sense of ownership and commitment to coastal protection. The study was conducted in accordance with established research ethics protocols and received ethics approval under Protocol No. FACULTY(3)-2026-01-044, ensuring the protection of participants' rights, confidentiality, and informed consent throughout the research process. Overall, the activity functioned as a transformative learning experience that expanded professional identity to include environmental stewardship, highlighting the importance of integrating reflective, participatory community extension activities into maritime education.

Keywords: Coastal Clean-up; Transformative Reflection; Lived Experiences; Environment; Community Extension.

INTRODUCTION

Marine and coastal ecosystems play a vital role in sustaining biodiversity, supporting human livelihoods, and ensuring maritime safety and security. As noted by Liu et al. (2017), the sea is an integral component of the Earth's ecosystem, providing habitat for millions of organisms. Consequently, coastal and marine conservation efforts are driven by the need to maintain ecosystem health and resilience, which are essential for environmental stability and the continued delivery of ecosystem services that support human well-being and socio-economic development. Despite their ecological and economic significance, coastal environments worldwide continue to face degradation caused by pollution, unsustainable resource utilization, and various anthropogenic activities. These challenges underscore the urgent need for targeted conservation strategies and community-based environmental initiatives.

Marine ecosystems are some of the most extensive and biologically diverse environments on Earth, encompassing coral reefs, mangroves, seagrass beds, and open ocean waters. They provide critical ecosystem

services, including climate regulation, carbon sequestration, nutrient cycling, shoreline protection, and food production (Reviews in Fish Biology and Fisheries, 2022; Nature Reviews Biodiversity, 2025; United Nations, 2017). These ecosystems also support fisheries, tourism, and the livelihoods of coastal communities, particularly in regions heavily dependent on marine resources (United Nations, 2017; Marine Policy, 2024). Despite their ecological, social, and economic value, marine ecosystems face significant threats from pollution, overfishing, habitat destruction, and climate change, highlighting the need for effective conservation and sustainable management strategies (Palmer, C. P. 2017), hence communities were also affected by rapid urbanization often experience inadequate infrastructure and limited access to essential services, increasing their susceptibility to flooding and its adverse impacts (Montebon et al., 2024; Montebon et al., 2025).

The growing problem of environmental pollution resulting from excessive waste, particularly plastic-based marine litter, has become a significant global issue that poses serious threats to coastal and aquatic ecosystems. Montebon et al., (2026), emphasize that there is a need to integrate environmental education into maritime academic programs by emphasizing the ecological and psychological impacts of polluted coastal environments while cultivating environmental awareness among future maritime professionals. One effective and sustainable approach is the implementation of volunteer-led coastal clean-up initiatives, which not only help mitigate marine pollution but also strengthen environmental stewardship, encourage civic participation, and foster a shared sense of social responsibility within the community.

Plastic pollution and marine debris have become growing global concerns due to their ecological and economic consequences (Ardente et al., 2022). Southeast Asia (SEA), a region with high population density, is one of the top contributors to marine debris, accounting for nearly 30 % of the world's ocean plastic pollution. Countries such as Indonesia (10%), the Philippines (6%), Thailand (3%), and Malaysia (3%) are major contributors, making local and regional interventions urgent (Purba et al., 2023; Jambeck et al., 2015). Coastal debris, driven by poor waste management, lack of public awareness, insufficient action, and weak policy enforcement, continues to accumulate and negatively impact coastal ecosystems (Vince & Hardesty, 2018; Herdiansyah et al., 2021; Kong et al., 2023).

A growing concern is the accumulation of marine debris, with Southeast Asia identified as one of the most significant contributors to ocean pollution (Purba et al., 2023). Coastal litter not only threatens ecosystems but also generates environmental, economic, and health-related problems. With the increasing environmental pollution caused by excessive waste, particularly marine litter dominated by plastics, has emerged as a pressing global concern that threatens coastal and aquatic ecosystems (Montebon, Pangatungan, & Tisoy, 2026). However, local responses are not always aligned with the severity of these impacts, and it remains unclear how community members' and government bodies' environmental perceptions influence active engagement in coastal protection (Kiessling et al., 2017). In response, coastal clean-up initiatives have emerged as crucial interventions to mitigate environmental degradation, promote community engagement, and foster the stewardship of marine resources.

Within higher education, particularly in maritime institutions, such initiatives serve dual purposes: they are both environmental actions and transformative experiences for faculty, staff, and students engaged in community extension programs. Coastal ecosystems are valued not only for their ecological services but also for their role in supporting livelihoods, recreational activities, and resilience against climate-related hazards. Consequently, universities have increasingly integrated community extension programs, including coastal clean-up drives, into their service and sustainability agendas to foster environmental stewardship, community well-being, and transformative learning (Montebon, Colonia, & Codera, 2024).

Research indicates that participation in environmental and conservation activities can yield significant individual and social benefits beyond immediate ecological outcomes. For example, engagement in community-led coastal restoration has been linked to improved psychological well-being, increased emotional connection to natural landscapes, and enhanced social connectivity among participants (Pichler et al., 2025). Within the context of community extension, studies also highlight the reflective and developmental impact of clean-up drives.

Student volunteers report an improved understanding of environmental preservation, teamwork, and discipline dimensions of transformation that align with the objectives of higher education service programs (Montebon et al., 2024). These findings are consistent with transformative learning theories, which posit that direct experience, coupled with critical reflection, can reshape participants' perspectives, values, and behaviors, ultimately influencing their professional identity and civic engagement.

Volunteer-led coastal clean-up programs represent a practical and accessible approach to addressing marine pollution. Beyond reducing waste and improving shoreline conditions, these initiatives help cultivate a culture of environmental responsibility and collective action. The active involvement of academic institutions and local organizations in such programs strengthens community partnerships. It reinforces ethical and environmental values among faculty, students, and volunteers participating in community extension activities (Montebon et al., 2022).

Despite growing attention to these outcomes, limited research has explored the lived experiences of faculty and staff, particularly within maritime disciplines, whose roles extend beyond instruction to include community engagement, program leadership, and institutional representation. Understanding these experiences is crucial for assessing the impact of participation on personal growth, teaching philosophies, community relationships, and long-term engagement in sustainability practices.

Thus, this study aims to explore the lived experiences of Marine Transportation faculty and staff who participated in the Coastal Clean-Up Drive under the SAILORS Program (Supporting Adopted Communities through Innovative, Literacy, Outreach, Resources, and Skills). Specifically, it seeks to determine participants' experiences in terms of the relevance of the coastal clean-up drive, effectiveness of the coastal clean-up drive, and level of participation towards the coastal clean-up drive, and to discover how these experiences influenced their attitudes upon involving the coastal activity as well as their personal and professional development. The study's findings aim to contribute to the improvement, sustainability, and strategic planning of community extension programs in maritime and higher education institutions.

METHODOLOGY

This study employed a qualitative research design and was conducted at the University of Cebu–Lapu-Lapu and Mandaue (UCLM) Campus. A phenomenological approach was utilized to explore the lived experiences of Marine Transportation faculty members who participated in a coastal clean-up drive as part of the department's community extension program. Fourteen (14) informants were involved in the study using purposive sampling and selected based on predefined inclusion and exclusion criteria. To be eligible for the study, informants must have participated in the department's community extension activities and have voluntarily provided informed consent to participate in the study.

For the interpretation and analysis of data, the researchers applied Colaizzi's descriptive phenomenological method, a rigorous seven-step analytical framework commonly used to derive the essence of lived experiences from qualitative data. Colaizzi's method involves (1) familiarization with the data, (2) identifying significant statements, (3) formulating meanings, (4) clustering themes, (5) developing an exhaustive description, (6) producing the fundamental structure of the experience, and (7) validating the findings through participant feedback. This systematic process ensured that emergent themes were grounded in participants' descriptions and that interpretations accurately reflected their experiences (Morrow et al., 2015).

Ethical considerations were rigorously observed throughout the conduct of this study. The research was carried out in accordance with established research ethics protocols and received ethics approval under Protocol No. FACULTY(3)-2026-01-044, ensuring the protection of participants' rights, confidentiality, privacy, and informed consent throughout the research process. The researchers adhered to the ethical principles of respect for persons, beneficence, justice, objectivity, social responsibility, and non-discrimination. In fulfilling their social responsibility, the researchers aimed to generate findings that would contribute to the enhancement of

community extension programs and provide meaningful benefits to the university, faculty members, students, and the broader community.

Prior to data collection, all participants were thoroughly informed about the purpose, objectives, scope, and procedures of the study. They were provided with a written informed consent form that clearly explained the nature of their participation, their rights as research participants, and the voluntary nature of their involvement. Participants were informed that they could refuse to participate or withdraw from the study at any time without penalty or any adverse consequences.

Confidentiality and privacy were strictly maintained throughout the research process. All information collected was used exclusively for academic and research purposes and was securely stored to prevent unauthorized access. Participants' identities were protected through the use of pseudonyms or participant codes, and no personally identifiable information was disclosed in any reports, publications, or presentations arising from the study.

To ensure the trustworthiness and credibility of the findings, the researchers maintained open, respectful, and transparent communication with the participants, fostering an environment that encouraged honest and authentic sharing of their lived experiences. Furthermore, the researchers followed a systematic and rigorous process in collecting, organizing, analyzing, and interpreting the data to ensure accuracy, fairness, and objectivity. These ethical practices safeguarded the dignity, rights, and welfare of all participants while upholding the integrity and credibility of the research.

RESULTS AND DISCUSSIONS

Alignment of Maritime Education with Real-World Environmental Practice

Participants emphasized that the coastal clean-up drive served as a bridge between formal maritime instruction and real-world environmental action, enabling them to internalize the importance of marine conservation within their professional domain. One faculty member explained, *"It directly links classroom lessons on marine environmental protection with real-world practice,"* while another noted that *"the activity helps students see that their future profession is not only about ships and cargo but also about being stewards of the sea."* These reflections demonstrate how the clean-up activity allowed faculty and staff to move beyond theoretical instruction and experience the practical application of maritime environmental principles. Through this engagement, participants recognized that maritime education extends beyond technical navigation and shipping operations to include responsibility for protecting marine ecosystems.

This finding is strongly grounded in Transformative Learning Theory, which suggests that meaningful learning occurs when individuals encounter experiences that challenge their existing assumptions and encourage critical reflection (Palma & Pedrozo, 2016). The coastal clean-up drive functioned as a practical learning intervention that exposed participants to environmental realities within coastal communities. This experiential context prompted faculty and staff to reassess their professional perspectives and acknowledge the broader ecological responsibilities associated with maritime professions. In this study, Transformative Learning Theory informed the design and interpretation of the activity as an experiential extension initiative, the focus on reflective narratives from participants, and the expected outcome of perspective transformation toward environmental stewardship.

Furthermore, the findings are supported by research in transformative sustainability education, which emphasizes that authentic environmental engagement enables learners to connect theoretical knowledge with lived ecological experiences (Brunnquell & Brunstein, 2018). Such experiences encourage individuals to integrate professional knowledge with ethical and environmental values. One informant affirmed this transformation by stating, *"It was truly relevant because it increased my awareness of environmental responsibility and highlighted the important role of faculty and staff in promoting coastal and marine conservation."* This reflection illustrates how the activity fostered a deeper understanding of the role of maritime

educators as advocates of sustainability, thereby reinforcing the integration of environmental stewardship into maritime education and professional identity.

Environmental Stewardship and Ecological Responsibility

Participants' reflections on ecological stewardship and environmental responsibility reveal significant shifts in their perspectives toward marine conservation, highlighting an important dimension of transformative learning. Faculty members emphasized that the coastal clean-up drive heightened their awareness of environmental protection and the importance of safeguarding marine ecosystems. One participant explained, *"It reinforces the importance of safeguarding coastal ecosystems, which are vital to navigation, fisheries, and the maritime industry,"* while another stated that the activity has *"environmental relevance with a direct impact, addressing the immediate threat of marine debris to local ecosystems."* These reflections indicate that the experience enabled participants to recognize the urgency of environmental challenges and the need for proactive ecological protection. By engaging directly with the coastal environment, faculty and staff witnessed firsthand the effects of marine pollution, which strengthened their awareness of the environmental responsibilities associated with maritime professions.

The transformative Learning Theory as the primary theoretical framework were used as guide in the interpretation of participants' experiences of this study. Transformative Learning Theory explains how individuals revise their perspectives through critical reflection on real-world experiences that challenge their existing assumptions (Siponen et al., 2025). In this study, the coastal clean-up drive served as an experiential extension activity that exposed participants to environmental realities in coastal communities, prompting them to reassess their understanding of environmental responsibility within maritime education.

Participants' reflections demonstrate this transformative process. One faculty member shared, *"It was truly relevant because it increased my awareness of environmental responsibility and highlighted the important role of faculty and staff in promoting coastal and marine conservation."* Such insights indicate a shift from passive awareness of environmental concerns to active recognition of their role in marine conservation. These findings are also supported by sustainability education research, which suggests that experiential environmental activities help reshape learners' worldviews and strengthen ecological consciousness and responsibility (Birdsall, 2025). Within the context of maritime education, this transformation reinforces the idea that environmental stewardship is not peripheral but a fundamental component of professional maritime practice and community engagement.

Development of Maritime Values and Social Responsibility

Participants perceived the coastal clean-up drive as highly effective in cultivating core maritime values while reinforcing a sense of social and environmental responsibility. Several reflections emphasized that the activity went beyond environmental action and contributed to character formation among maritime educators and students. One participant noted that *"the activity was effective in instilling environmental responsibility among participants,"* while another explained that it *"allowed students to apply maritime values such as discipline, teamwork, and safety in a meaningful context."* These insights indicate that the clean-up drive functioned not only as an environmental initiative but also as a practical avenue for applying the ethical principles embedded in maritime education. Through collaborative work and shared responsibility in protecting coastal environments, participants experienced firsthand how professional maritime values can be translated into real community engagement.

This aligns with the transformative Learning Theory as a key theoretical framework that underpins the interpretation of participants' experiences in this study. Transformative Learning Theory posits that learning occurs when individuals engage in experiences that prompt reflection and lead to shifts in personal values, attitudes, and social perspectives (Mezirow, 2000; Taylor, 2017). Participants' reflections illustrate this transformative process. One informant stated that the clean-up *"was effective in achieving its objectives, fostering teamwork, social responsibility, and environmental stewardship,"* highlighting how the experience reinforced ethical and collaborative dimensions of maritime practice. Supporting this interpretation, research in

sustainability and experiential education indicates that hands-on environmental engagement fosters prosocial behavior, civic responsibility, and a stronger commitment to environmental protection (Taylor, 2017). Within maritime education, such experiential initiatives are particularly significant because they connect professional values such as discipline, cooperation, and safety with real environmental and community contexts, thereby strengthening both professional identity and social accountability.

Knowledge Application and Connection to Global Standards

Another major theme highlights how the coastal clean-up drive enabled participants to apply maritime knowledge while strengthening their awareness of international environmental standards. Participants recognized that the activity connected classroom instruction with real-world maritime practices and global regulatory frameworks. One informant explained that *“beyond removing waste, the clean-up drive strengthened their awareness of international maritime conventions like MARPOL,”* emphasizing the link between environmental action and maritime regulations on marine pollution. Others noted that *“all cadets participated in the event,”* demonstrating how the activity served as a shared learning experience where theoretical knowledge was reinforced through practical engagement. These reflections indicate that the coastal clean-up drive provided a meaningful platform for translating academic knowledge into practice while highlighting the relevance of global maritime standards in local environmental contexts.

This resonates by explicitly integrating Experiential Learning Theory and Constructive Alignment Theory as key theoretical frameworks underpinning this study. Experiential Learning Theory explains that learning becomes more meaningful when individuals engage in concrete experiences followed by reflection, allowing them to integrate theory with practice (Kolb, 1984). At the same time, Constructive Alignment Theory emphasizes that learning outcomes are enhanced when teaching activities are aligned with curricular objectives and professional competencies (Biggs et al., 2015). In the context of this study, the clean-up activity was aligned with maritime education goals related to marine environmental protection, sustainability, and adherence to international conventions such as MARPOL.

Participants’ reflections illustrate how these theoretical frameworks operated in practice. By participating in a real environmental initiative, faculty and staff were able to contextualize maritime environmental policies within local ecological issues. Research in maritime and sustainability education suggests that experiential activities linking local environmental action with international standards promote deeper professional accountability and environmental awareness (Siponen et al., 2025). Consequently, the coastal clean-up drive functioned not only as a community extension activity but also as an experiential learning platform that allowed participants to situate local environmental practices within the broader framework of global maritime environmental governance.

Active and Collaborative Engagement

Participants consistently described the coastal clean-up drive as an activity that fostered active, voluntary, and collaborative participation. Many informants emphasized that the initiative encouraged participants to move beyond passive involvement toward meaningful engagement characterized by teamwork and shared responsibility. One participant observed that *“the activity encouraged active participation and collaboration,”* noting that *“students worked together with enthusiasm, showing initiative and leadership.”* Another informant similarly highlighted that the activity *“encouraged active and voluntary involvement, with participants showing enthusiasm, cooperation, and commitment throughout the coastal clean-up drive.”* These reflections suggest that participation was not limited to attendance but involved collective effort, cooperation, and proactive engagement in environmental protection. Through these interactions, participants experienced the social dimensions of learning and environmental stewardship while reinforcing important maritime values such as teamwork, discipline, and leadership.

This supports with the integration of the Experiential Learning Theory and Social Learning Theory as foundational frameworks guiding the interpretation of participation in this study. Experiential Learning Theory explains that learning becomes more meaningful when individuals actively engage in concrete experiences that

allow them to apply knowledge and reflect on their actions (Kolb, 2014). In addition, Social Learning Theory emphasizes that learning occurs through interaction, observation, and collaboration within a social context (Bandura, 2018). This framework helped explain how participants learned from one another through teamwork and shared environmental action during the clean-up activity.

Participants' reflections illustrate how these theoretical perspectives operated in practice. The collaborative nature of the activity allowed individuals to observe peers' actions, exchange ideas, and collectively contribute to environmental protection. Research in sustainability education also supports this finding, indicating that participatory environmental initiatives promote deeper engagement and learning when individuals work collaboratively toward a shared goal (Sterling, 2011). Within the context of maritime education, such collaborative engagement strengthens both environmental stewardship and professional competencies, demonstrating how community extension activities can simultaneously support academic learning, social interaction, and environmental responsibility.

Sense of Ownership and Environmental Commitment

Another theme that emerged from participants' reflections is the development of a strong sense of ownership and commitment toward the marine environment. Informants emphasized that participating in the coastal clean-up drive allowed them to feel personally connected to the protection of coastal ecosystems. One participant shared that *"the drive gave them a sense of ownership in protecting the marine environment, which is essential for their growth as future seafarers."* Similarly, another informant reflected that *"participation builds a sense of place,"* explaining that individuals who actively clean and care for a specific coastline are more likely to protect it from future environmental threats. Additional reflections such as *"every effort counts"* and *"protecting our oceans, marine life, and beaches for all of us"* further illustrate how the activity fostered emotional engagement and ethical responsibility toward the environment. These statements suggest that the coastal clean-up drive nurtured a deeper connection between participants and the marine ecosystem, transforming environmental protection from a theoretical concept into a personal commitment.

From theoretical perspective, this explicitly integrates Transformative Learning Theory and Place-Based Education Theory as key theoretical frameworks underpinning the interpretation of participants' experiences in this study. Transformative Learning Theory explains that individuals develop new perspectives and commitments when they critically reflect on meaningful experiences that challenge their prior assumptions (Mezirow, 2018). Complementing this perspective, Place-Based Education Theory emphasizes that learning becomes more meaningful when individuals interact directly with their local environment, fostering emotional attachment and long-term stewardship behaviors (Gruenewald & Smith, 2014). This framework helped explain how participants' engagement with the coastal setting contributed to their sense of responsibility for protecting the marine environment.

Participants' reflections demonstrate how these theoretical perspectives manifested in practice. Through direct involvement in cleaning and restoring the coastal area, participants developed a stronger emotional and ethical connection to the environment. This sense of ownership reinforced their understanding that maritime professionals have a responsibility not only to operate within marine environments but also to actively protect them. Consequently, the coastal clean-up drive served as a transformative educational experience that strengthened environmental commitment and fostered long-term stewardship among participants within the maritime education community.

CONCLUSION

This study concludes that the coastal clean-up drive, as a community extension initiative within maritime education, served as a meaningful and transformative learning experience for Marine Transportation faculty, staff, and students. The findings demonstrate that the activity effectively bridged theoretical maritime instruction with real-world environmental practice, fostering heightened environmental awareness, strengthened maritime values, and a more profound sense of social and ecological responsibility. Through active participation,

collaboration, and reflective engagement, participants developed a stronger professional identity that recognizes stewardship of the marine environment as integral to maritime practice. Anchored in Transformative Learning Theory and experiential learning frameworks, the coastal clean-up drive enabled perspective transformation by connecting local environmental action to global maritime standards and long-term sustainability goals. Overall, the study highlights the importance of integrating structured, reflective, and participatory environmental activities into maritime education to foster holistic learning, community engagement, and sustainable professional development.

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