Training In Values for Environmental Care at the San Isidro Labrador Educational Institution, Atánquez (Cesar)

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Abstract

Introduction: This research article examines environmental values training at the San Isidro Labrador Educational Institution (Atánquez, Kankuamo Indigenous Reservation, Sierra Nevada de Santa Marta), understood as a pedagogical strategy to strengthen a culture of care and environmental preservation. It begins with the specific problems of inadequate waste management, loss of vegetation cover, and low community participation. It proposes coordinating processes of awareness, dissemination, and situated practice of values such as respect, responsibility, belonging, and solidarity.

Methods: Methodologically, a descriptive-projective experience is used, supported by Participatory Action Research (PAR), surveys, and observation, aimed at promoting the PRAE (Prae) and connecting students, families, and teachers.

Results and conclusions: The results reflect advances in awareness and appropriation, along with persistent challenges (recycling habits, school organization, and community networks). The relevance of Colombian regulatory frameworks and theoretical references on pro-environmental values and behavior is discussed. It concludes with lines of pedagogical action and school management integrated into the Kankuamo context.

Keywords: Values education, environmental stewardship, San Isidro Labrador Educational Institution, Atanquez

1. Introduction

Recent socio-environmental transformations have intensified tensions between local ways of life and environmental practices that undermine their ecological foundation. In Atánquez (Valledupar, Cesar), the territory of the Kankuamo people, the community recognizes impacts associated with the accumulation of solid waste, the felling and burning of trees, the dumping of wastewater, and the loss of biodiversity, situations that compromise public health and ecosystem balance. In this context, schools take on a strategic role in cultivating an ethic of care that transcends declarative content and materializes in habits, shared norms, and collective projects.

Developing environmental values involves linking students' everyday experiences with practices of observing the territory, deliberating on common problems, and co-designing viable solutions. This requires a situated pedagogy that integrates local knowledge and cultural memory (guardians of nature, reciprocity with the environment) with contemporary frameworks of environmental education and sustainable development. Thus, values such as respect, responsibility, belonging, and solidarity cease to be abstract concepts and become decision-making criteria for waste management, rational water use, and the conservation of sensitive areas.

The general objective guiding this reflection is to determine the development of values for environmental care and preservation at the San Isidro Labrador Educational Institution, accompanied by specific objectives focused on (i) promoting the school's environmental project through educational activities, (ii) leading community outreach and awareness-raising processes, and (iii) fostering values of love, solidarity, respect, and responsibility in the educational community. These goals are aligned with national policies (Law 99 of 1993; Law 115 of 1994) that promote comprehensive, democratic, and environmentally responsible education, and with the premise that action for environmental protection is a joint task between the State, schools, families, and students.

Methodology

The experience is part of the interpretive paradigm (Martínez, 2025), understood as a way to understand the meanings that actors attribute to their practices and contexts, privileging the intersubjectivity and

reflexivity of the researcher (Martínez, 2010). Consistent with this, a qualitative approach is adopted that favors situated observation, the reconstruction of meanings, and the contextualized analysis of educational action, avoiding reducing reality to variables untethered from the territory (Martínez et al., 2022). As a cross-cutting input, a state-of-the-art review was developed that systematized conceptual and empirical background on environmental education, values formation, and pro-environmental behavior in school contexts. This review guided analytical categories, selection of strategies, and formative assessment criteria (Martínez et al., 2024).

The experience that inspires this reflection combined a descriptive-projective design with Participatory Action Research (PAR) components and quasi-experimental before/after follow-up actions, without strict control of extraneous variables, aimed at assessing changes in school attitudes and practices. Brief surveys (home recycling routes, community participation, consumption habits), naturalistic observation, and project outreach to administrators, teachers, families, and students (workshops, talks, bulletin boards, flyers, and the formation of "environmental guardians") were used. The scope of analysis was eminently formative: rather than measuring isolated effects, the objective was to interpret how the sustained practice of values (respect, responsibility, belonging, solidarity) translates into caring behaviors for the environment inside and outside the classroom. In ethical and cultural terms, the process respected the Kankuama worldview, historically based on reciprocity with nature, and sought not to impose exogenous frameworks, but rather to integrate local knowledge with references from school environmental education (PRAE). Student participation was promoted through role-playing (environmental brigades and guardians), source separation micro-projects, and communication activities (murals, dramatizations, guided social gatherings). Data analysis was guided by categories of environmental awareness, pro-environmental habits (e.g., recycling, responsible consumption), social capital (participation in environmental groups), and ownership of the school environment. As input for the present reflection, the regulatory frameworks (Decree 948/1995, Law 99/1993, Law 115/1994, Sentence C-339/02) and theoretical references on values and pro-environmental behavior (Schwartz; Stern and Dietz) were reviewed, understanding that the value orientation influences pro-environmental beliefs, attitudes and behaviors (egoistic, altruistic, biospheric).

Results

The findings show a relatively high declarative awareness of the meaning of recycling and the importance of environmental care; however, there are gaps in habits and in participation in organized networks. According to the survey administered, around 80% of people do not recycle systematically; 20% report the existence of sorting bins, while 80% do not identify available infrastructure or consider it insufficient or poorly used. Regarding services, 50% recognize the waste collection entities and 50% do not, which suggests information deficits and institutional coordination gaps. Notably, 100% do not belong to ecological groups, which limits the social capital needed to sustain collective practices. In terms of consumption habits, 20% report a preference for canned products and 80% for natural products; and 50% have participated in environmental talks—an indicator of awareness-raising with room for improvement.

At the pedagogical level, actions were consolidated such as: the institutional launch of the project, outreach with administrators and teachers, awareness-raising workshops, printed materials (brochures, bulletin boards), and the formation of environmental guardians. These interventions fostered the establishment of a shared lexicon of environmental values (respect, responsibility, belonging, solidarity) and activated micro-practices (source separation, rational use of water and energy, cleaning of common areas). Greater appropriation of the school environment was observed, along with a willingness to replicate messages at home—consistent with the idea that the school can catalyze community care processes.

Nevertheless, structural challenges remain: (i) infrastructure limitations (recycling stations—*puntos limpios*—and internal sorting routes), (ii) scarce institutionalization of roles and stable pedagogical schedules, (iii) weak coordination with external actors (municipal sanitation, environmental organizations), and (iv) the need to continue cultivating values that connect Kankuamo identity with contemporary waste-management practices. Overall, the results suggest that the territory's cultural capital and ecological memory provide a strong basis for rooting environmental values, but

they require school scaffolding and partnerships that turn awareness-raising into sustainable routines and annual cycle projects (the School Environmental Project PRAE student social service, environmental fairs, and mixed school–family committees).

The results depict a scenario marked by high declarative awareness regarding the meaning of recycling and the relevance of environmental care; however, this cognitive disposition does not consistently translate into sustained habits or organizational engagement. The survey indicates that about 80% of people do not recycle systematically, revealing an intention–action gap: the value of recycling is recognized, but daily routines that would materialize it are not adopted. This mismatch is related, in part, to infrastructure conditions: only 20% report the existence of sorting bins, while the remaining 80% either do not identify these devices or perceive them as insufficient or poorly used. In this way, the absence or low visibility of recycling stations (*puntos limpios*) hinders the conversion of knowledge into practice (Martinez, et al, 2024).

Likewise, data on sanitation and disposal services suggest informational asymmetries. Approximately 50% know which entities collect solid waste and 50% do not, pointing to communication and coordination deficits. This institutional ambivalence translates into uncertainty about schedules, routes, and sorting criteria factors that discourage citizen participation. Ecological social capital appears particularly weakened: 100% of respondents reported not belonging to environmental groups or *semilleros*, which reduces the capacity to sustain collective practices and generate shared norms that reinforce pro-environmental behaviors over time.

Regarding consumption habits, there is a majority preference for natural products (80%) over canned goods (20%). Although this distribution could serve as a lever for policies aimed at reducing packaging and waste, it is not yet reflected in sufficiently consolidated post-consumption management (sorting, temporary storage, delivery to recyclers). Participation in talks or awareness-raising activities reaches 50%, an intermediate level that shows potential for expansion if pedagogical formats are diversified (hands-on workshops, class-by-class campaigns, classroom challenges) and practical, territory-linked experiences are incorporated.

On the pedagogical and organizational front, the institution achieved significant milestones: the launch of the environmental project, outreach spaces with administrators and teachers, awareness-raising workshops for the school community, printed materials (brochures and bulletin boards), and the formation of environmental guardians. These actions facilitated the installation of a shared values lexicón respect, responsibility, belonging, and solidarity and promoted micro-practices such as source separation, rational use of water and energy, and cleaning of common areas. A greater appropriation of the school environment was also recorded, as well as a willingness to replicate messages at home, in line with the premise that the school can act as a catalytic node for community care processes.

Even so, structural challenges persist that condition the sustainability of change: (i) infrastructure limitations—scarcity of collection points, signage, and clear internal routes; (ii) low institutionalization of roles and pedagogical schedules that ensure continuity (e.g., class-based collection calendars or rotating brigades); (iii) insufficient coordination with external actors sanitation service, environmental organizations, and professional recyclers to close the waste cycle; and (iv) the need to deepen value-based education rooted in place, connecting Kankuamo identity and ecological memory with contemporary management practices (sorting, composting, reuse). Taken together, these challenges suggest that awareness-raising alone does not guarantee habit adoption; it requires institutional scaffolding and alliances that turn it into predictable routines and annual-cycle projects.

The accumulated evidence supports the view that the territory's cultural capital and ecological memory constitute a privileged platform for embedding environmental values; however, for that potential to translate into sustainable behaviors, it is essential to articulate school-based mechanisms and cooperation networks. From the psychology of values, Schwartz's (1994) axiological structure provides a framework for understanding how dispositions such as universalism and benevolence can underpin biospheric and altruistic orientations toward the environment, while Stern's (2000) Value–Belief–Norm Theory, expanded by Stern and Dietz (1994), explains the sequence connecting values → ecological beliefs → awareness of consequences → assignment of responsibility →

personal norms, and, ultimately, behaviors. Under this logic, a PRAE with specific goals, simple indicators (e.g., percentage of source separation by class, number of families involved, frequency of deliveries to recyclers), and organized student participation (brigades or environmental guardians) can activate that motivational sequence and turn awareness-raising into observable habits (Schwartz, 1994; Stern, 2000; Stern & Dietz, 1994).

At the didactic level, environmental education requires situated, problem-posing experiences that link content to the everyday lives of students and their families. The classic proposals of Giordan and Souchon (1997) emphasize active, contextualized strategies, which are key to turning concepts into competencies and routines; for his part, Freire's (1970) dialogic, critical-reflective pedagogy guides the construction of environmental awareness that does not stop at message transmission but promotes praxis (reflection–action) and co-responsibility around concrete problems in the school setting. Complementarily, the development of moral judgment and ethical dispositions described by Puig Rovira (1998) suggests that the internalization of norms—respect, responsibility, solidarity—is strengthened when the school creates coherent moral climates and deliberative spaces in which students participate in defining rules and commitments.

Operationally, three fronts reinforce the transition from "knowing" to "doing": (1) Functional signage of recycling stations (*puntos limpios*) and visible routines (set days and times for sorting and drop-off) that reduce friction between intention and behavior; (2) Strengthening environmental guardians, with clear roles (classroom monitoring, recording with simple indicators, monthly reports) to consolidate social norms and peer modeling; and (3) Regular scheduling of sorting and drop-off days, coordinated with the sanitation service and professional recyclers, so that the school closes the logistical loop and actions are not diluted. All of this requires an expanded cooperation network school, families, cabildo, sanitation services, environmental organizations—that aligns goals and responsibilities and that, following the value–belief–norm pathway, transforms declared motivation into sustainable, verifiable practices (Giordan & Souchon, 1997; Freire, 1970; Puig Rovira, 1998; Schwartz, 1994; Stern, 2000; Stern & Dietz, 1994). In this way, a culture of co-responsibility will transcend the classroom and project into the broader community, anchored both in local identity and in robust theoretical and pedagogical frameworks.

Discussion

The evidence suggests that values education is a prerequisite for change, but it does not by itself guarantee behavioral modification unless it is accompanied by enabling structures (infrastructure, time, roles, and partnerships) and by recurring opportunities for practice. From the psychology of values, Schwartz's (1994) model helps explain how dispositions such as universalism and benevolence can undergird biospheric and altruistic orientations; in turn, the Value–Belief–Norm chain proposed by Stern (2000) and Stern and Dietz (1994) explains that values activate beliefs about environmental consequences, generate an assumption of responsibility, and crystallize into personal norms that predispose behavior. In school settings, this sequence stabilizes only when the institution turns values into visible routines (for example, sorting circuits) and shared expectations (classroom agreements, public commitments, and periodic feedback).

From a didactic standpoint, the transition from awareness to action requires situated experiences that connect personal well-being, the common good, and care for the biosphere. The active, contextualized proposals of Giordan and Souchon (1997) guide the design of tasks with a real purpose (e.g., waste audits or clean-up brigades) and the evaluation of results; Freire's (1970) dialogical pedagogy reminds us that environmental awareness is consolidated through processes of praxis (reflection–action) and co-responsibility; and Puig Rovira's (1998) school moral-climate approach suggests creating deliberative spaces in which students participate in defining rules, restorative sanctions, and recognitions that reinforce the pro-environmental norm.

In this context, Participatory Action Research (PAR) is relevant for moving from isolated actions to the co-construction of solutions with students, families, and local actors, avoiding paternalism and strengthening agency and cultural relevance. This is crucial in Indigenous contexts: articulating local knowledge and traditional authorities helps ensure that environmental values are not an external add-on but rather the continuation of a local memory of reciprocity with nature.

The Colombian regulatory framework provides solid support Law 99 of 1993 (SINA), Law 115 of 1994 (aims of education), Decree 948 of 1995 (air quality), and constitutional case law on the right to a healthy environment but its effectiveness in schools depends on leadership by administrators, teacher support, and governance through councils, committees, and a PRAE with verifiable goals (Congress of Colombia, 1993, 1994; Ministry of Environment, 1995; Constitutional Court, 2002). For implementation, a two-pronged strategy is suggested:

1. Institutionalize the environmental project with clear goals, indicators, and responsibilities (percentage of source separation by class, number of families involved, frequency of deliveries to recyclers, reduction of mixed waste).
2. Expand the cooperation network (environmental organizations, universities, sanitation company, families, and cabildo) to ensure cycle closure: signage for recycling stations, calendars for sorting and drop-off, and technical support.

Operationally, three levers can close the gap between declared knowledge and effective habit: (a) design infrastructural "nudges" visible recycling stations, color-coded containers, and strategic placement to reduce behavioral friction; (b) explicit social norms, with public class-by-class commitments and periodic feedback (progress boards, classroom reports), consistent with the activation of personal norms described by the VBN model (Stern, 2000; Stern & Dietz, 1994); and (c) service-learning and classroom projects with simple metrics that demonstrate tangible impact, reinforcing the internalization of values (Giordan & Souchon, 1997; Puig Rovira, 1998). When these dimensions values, pedagogical structure, governance, and territorial network are integrated, the school becomes a platform for community ecological learning, capable of accelerating the transition toward a culture of care and co-responsibility that is sustainable over time.

Conclusions

The formation of environmental values at the San Isidro Labrador Educational Institution is feasible and appropriate for the Atánquez context; it has generated awareness and some initial practices (sorting, responsible consumption), but it requires institutionalization to be sustained. 2) Awareness-raising is a starting point: it must be complemented with minimum infrastructure (recycling stations, signage), pedagogical time (weekly recycling routes, brigades), and partnerships with external actors. 3) Kankuamo cultural identity offers a powerful repertoire of meaning for reframing environmental care; its curricular and community integration enhances student ownership.4) The legal framework and educational policies provide support to consolidate the PRAE and orient school management toward sustainability.

Going forward, it is recommended to: (a) set annual goals (e.g., percentage reduction of mixed waste; number of families involved), (b) strengthen participation (ecological groups, social service, fairs, science club), (c) develop **situated** pedagogical materials (guides, booklets, local narratives), (d) monitor with simple indicators (checklists, classroom logs), and (e) publicly recognize achievements (green classroom badges, symbolic incentives). These fully feasible actions can turn values education into a school culture of care, where respect, responsibility, belonging, and solidarity are translated daily into decisions and habits that preserve our common home.

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