

ENVIRONMENTAL EDUCATION: REPORTS OF TEACHING PRACTICES IN ELEMENTARY SCHOOLS



<https://doi.org/10.56238/arev7n4-077>

Submitted on: 03/08/2025

Publication date: 04/08/2025

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ABSTRACT

The objective of this research was to report the practice of Environmental Education in the pedagogical activities of teachers in municipal schools in a region of the State of Bahia (BA), in Elementary School classes, and to reflect on the main difficulties encountered for the implementation of Environmental Education within the classrooms. With a quantitative

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approach, the exploratory research collected data through the application of an online form. The results indicated that the teachers surveyed are interested in the theme and strive to insert Environmental Education in their school practices. However, difficulties are pointed out in the engagement factor of the researched theme. It was concluded that it is necessary to rethink and plan to overcome challenges regarding Environmental Education at school.

Keywords: Environmental Education.

INTRODUCTION

The planet is going through profound transformations such as climate change, aggressive natural phenomena and, especially, human action.

For several centuries, humanity has unbridled and uncontrolled consumed natural resources and polluted the seas, air, waters, and soil (SILVA, 2017), leading the environment to a state of degradation in an uncontrolled way never seen before. In view of this, the consequences of these acts have been showing their reflections in recent decades.

For Silva (2017, p. 2), the "highly capitalist contemporary society is experiencing a period of unbridled consumerism, where natural resources have been exploited in an uncontrolled and disorderly way, running the risk of being exhausted in a short time". The effects of the damage caused to the environment seem to be felt by the government (POTT; ESTRELA, 2017). However, environmental problems seem to be irreversible and, according to Silva (2017), must be urgently addressed and globally with coordinated actions by initiatives at a global level. But local action can produce beneficial results for the whole society, national and international.

In this view, the school space is a fertile field for the various forms of learning that aim to improve the different environments we experience (LAPA JUNIOR et al., 2023). Practicing Environmental Education in schools is to enable the construction of a more just and solidary world, aiming to "change attitudes, skills and values and not just behaviors" (LOUREIRO, 2007, p. 67).

This work aims to reflect the practice of Environmental Education in municipal schools in a region of the State of Bahia (BA), in Elementary School I classes. With a quantitative approach, the research was carried out through the application of an online form on the insertion of Environmental Education practices in teaching activities.

METHODOLOGY

The present research is exploratory with a quantitative approach, carried out through the application of an online form through Google Forms. 68 teachers participated in the municipality of São Desidério - BA, at the request of the Municipal Department of Education, in 2024, following the rules of Resolution 510/2016 of the National Health Council (CNS).

VIEWS ON ENVIRONMENTAL EDUCATION

Environmental Education arises from the concerns of ecologists to draw attention to environmental problems due to the uncontrolled use of natural resources and destruction of forests, and thus involve society in environmental actions, according to Silva (2017). It is said that the first definition for Environmental Education emerged in the International Union for the Conservation of Nature, in 1971, in which it underwent conceptual expansions by the Stockholm Conference and then by the Tbilisi Conference in Georgia (SATO, 2004; MOUTH; SARAÇLI, 2019).

However, for Morales (2011) and Sauv   (2005), Environmental Education does not have a common concept, but "several understandings and discussions, critics for and against how this Environmental Education is presented today in Brazil and in the world" (GIORDAN; GALLI, 2014, p. 3). In this text, we will present some definitions to better support the theme.

Initially, Environmental Education is considered "as a concern of ecological movements with the practice of awareness, which is capable of drawing attention to the poor distribution of access to natural resources" (CARVALHO, 2006, p. 71).

Pelicioni (1998, p. 29) mentions that "environmental education at all levels has sought to play this difficult role, rescuing values such as respect for life and nature, among others, in order to make human society fairer and happier".

Medina (2002) conceptualizes Environmental Education in a specific way, which does so in a perspective of promoting education and global critical understanding:

[...] a process that consists of providing people with a critical and global understanding of the environment, which seeks to elucidate values, as well as to develop attitudes that allow them to adopt a conscious and participatory position on issues related to the conservation and adequate use of natural resources (MEDINA, 2002, p. 51).

Reigota (2001) defines that Environmental Education "should be understood as political education, in the sense that it claims and prepares citizens to demand social justice, national and planetary citizenship, self-management and ethics in social relations and with nature."

According to Sorrentino et al. (2005), environmental education emerges as an education system that directs to environmental knowledge based on ethics and the political principles of the market and socialization, in which the possession and use of nature are divided into benefits and losses.

For Airles (2014), Environmental Education works as a source to sensitize, raise awareness and mobilize populations in the search for improvements, and should change the social principles and competencies of individuals so that through conservation and rational use of nature there are better living conditions.

According to Castillo (2010), environmental education aims to promote the commitment to contribute to social, cultural and economic changes, based on the development of values, attitudes and skills that allow everyone to form their own criteria, assume their responsibility and play a constructive role.

Environmental Education should generate changes in the quality of life, in personal behavior and in human relationships, which lead to solidarity and care for all forms of life and for the planet, cite Febres-Cordero and Florián (2002).

From these perspectives, we corroborate that the focus of this work does not analyze environmental transformations only in the society-nature relationship, but adopts the conception of Environmental Education that rescues the connection between "the personal, sociocultural and natural aspects that sustain life on the planet, in order to recover the understanding that the quality and sustainability of life include both the health of people and groups and that of the environment where they live" (DANSA; DUCK; CORRÊA, 2014, p. 81).

Thus, we seek to report the practices of Environmental Education in the school environment.

ENVIRONMENTAL EDUCATION AT SCHOOL

The proposal of this research seeks to understand the possible educational practices in Environmental Education of teachers to improve their pedagogical activities in order to modify actions and behaviors of individuals, specifically students, in the school environment.

Aiming to transform the reality of an individual and guide their attitudes, their way of thinking and acting in their social environment, Environmental Education must be worked on at school as it is the main space to transform the life of a community (LAPA JUNIOR et al., 2023). As an area with transformative potential, Karatekir (2019) comments that teachers play an important role in the formation of ecological citizens and that they can defend a new social order. Thus, teaching students to act for the environment is essential (MARPA, 2020). In this view, Marpa (2020, p. 46) observes that environmental education

"has been practiced in some schools in different parts of the world", with a view to obtaining a conscious population.

However, there is a recurrent difficulty in training teachers to establish an efficient methodological and pedagogical framework (SHÖN, 1995) that allows the integration of an interdisciplinary and transversal approach specific to the so-called Environmental Education in the school context (REIGOTA, 2001; ZAKZEVSKI; SATO, 2007). Although this argument is accepted and defended in the field of education, there are still many doubts about how to insert this approach into the daily life of the classroom (SANTOS; MORTIMER, 2009).

Capra (2002) contributes to the discussion by stating that the current model of environmental education, which is applied in schools, is not effective in the construction of knowledge and in forming people with ecological-critical awareness. The author comments that "To build a sustainable society for our children and future generations, we have to rethink from the ground up a good part of our technologies and social institutions, in order to be able to bridge the enormous abyss that has opened up between human projects and the ecologically sustainable systems of nature" (CAPRA, 2002, p. 99).

Therefore, the school has the power to stimulate the present and future of students, professionals, families, and everyone who believes in and works together with the institution, for example, contributing to pedagogical projects (LAPA JUNIOR et al., 2023). Lapa Junior et al. (2023, p. 287) report that the school inserted in an environmental education "must develop a Pedagogical Political Project (PPP) together with the school collective, directing the institution towards sustainability. It is important to emphasize that the insertion is permeated in all disciplines, that is, that there is an interdisciplinarity involving the entire school".

Silva and Leite (2008) indicate that it is necessary to invest in the training of educators and that the theme of the Environment should permeate all disciplines and contents, for example.

For the above, a research was carried out in schools in a municipality in the State of Bahia to understand how practices in Environmental Education are being implemented in classrooms.

RESULTS

The online form applied to teachers contains 20 closed Likert questions with five

levels of acceptance (1 = never to 5 = always). The research addresses the experiences with the practice of teaching Environmental Education in pedagogical activities.

Of the participants, 77.9% (N = 53) were female and 58.8% (N = 40) indicated the marital status of married or stable union. Table 1 shows the other demographic variables to compose the profile of the participants.

Table 1: Profile of the participants

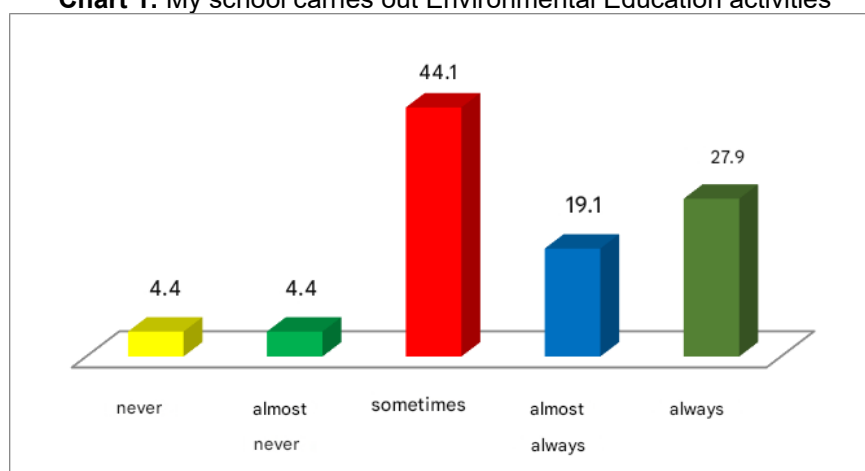
Variable	Description	N (%)
Gender	female	53 (77,9)
	male	14 (20,6)
marital status	married/common-law union	40 (58,8)
	Single	19 (27,9)
	Separated or divorced	6 (8,8)
	other	3 (4,4)
Age (age range)	from 30 to 39 years old	19 (27,9)
	40 to 49 years old	32 (47,1)
	50 to 59 years old	11 (16,2)
schooling	Higher education (incomplete)	8 (11,8)
	Complete higher education	25 (36,8)
	Technical course, high school or equivalent	3 (4,4)
	Master's Degree (in progress)	2 (2,9)
	Postgraduate (specialization)	29 (42,6)

Source: Survey data.

This paper presents five results that allow us to clarify the performance of teachers in their pedagogical practices in the classroom.

1st question: "Does my school carry out Environmental Education activities"

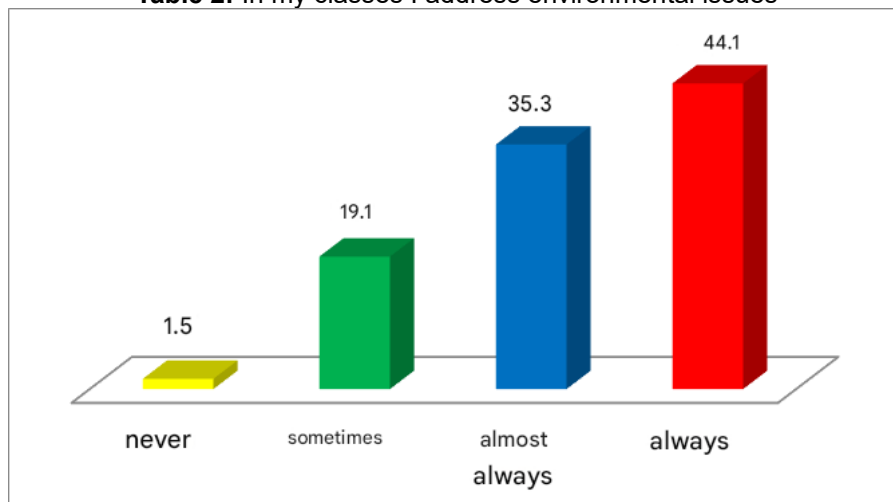
Chart 1: My school carries out Environmental Education activities



Source: Survey data.

2nd question: "In my classes I address issues of an environmental nature"

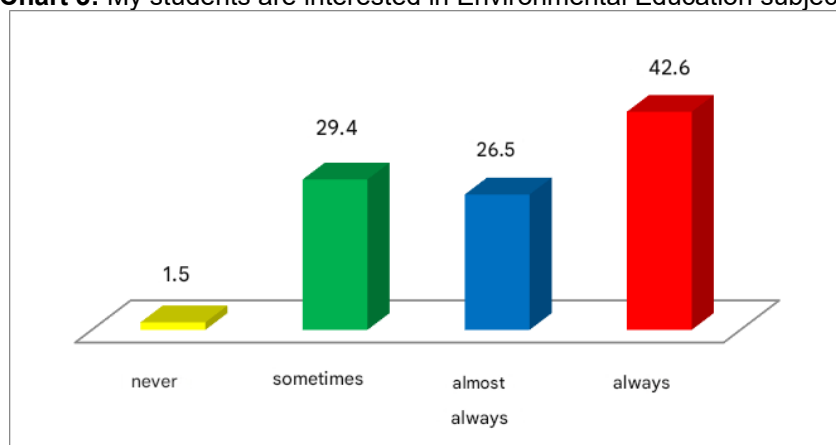
Table 2: In my classes I address environmental issues



Source: Survey data.

3rd question: "My students are interested in Environmental Education subjects".

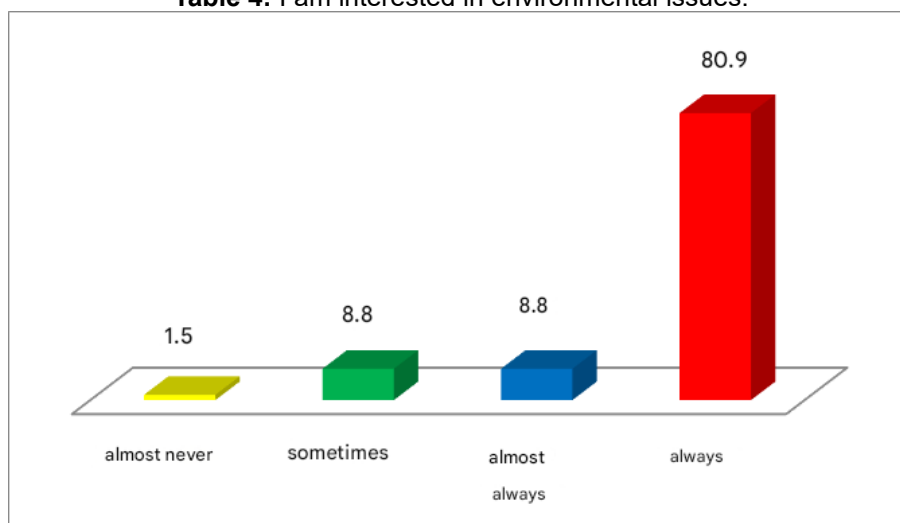
Chart 3: My students are interested in Environmental Education subjects



Source: Survey data.

4th question: "I am interested in environmental issues."

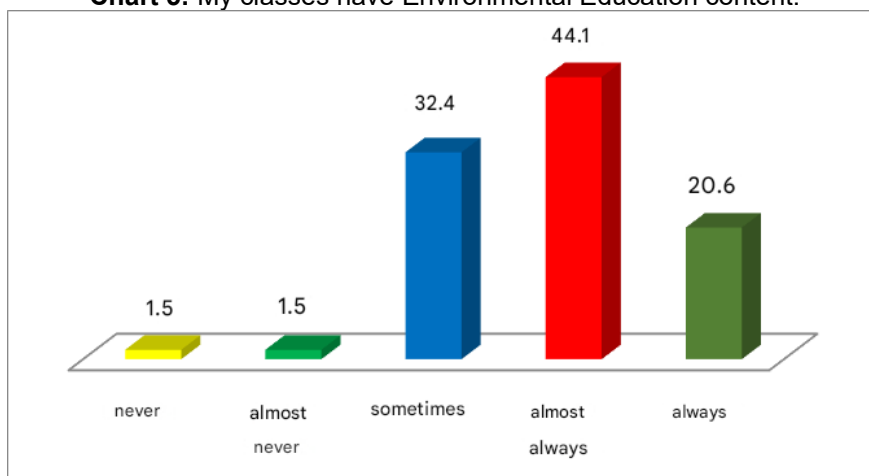
Table 4: I am interested in environmental issues.



Source: Survey data.

5th question: "My classes have Environmental Education content".

Chart 5: My classes have Environmental Education content.



Source: Survey data.

DISCUSSION

The importance of Environmental Education activities in schools is observed by 47% of the teachers in the survey, shown in Chart 1, contrasting with 8.8% who indicated that they never or almost never carry out Environmental Education activities in their schools. The school is a social and local space, where students and teachers understand the effective values for an egalitarian, just and more humane society. Thus, it becomes pertinent to insert Environmental Education in school practices, since "more sustainable behaviors, socio-environmentally speaking, must be learned and transcended in practice in

the daily life of school, resulting in the formation of citizens responsible for the success of future generations" (PAULA, 2023, p. 39).

The school environment is a space of excellence for the awareness of future citizens about the environment, not only because Environmental Education is provided for in official documents, but because of the possibility of being treated in the contents in an interdisciplinary way, relating the human being with nature. According to Paula (2023), the insertion of Environmental Education in the training of children, young people, and adults can be a way to sensitize students to a healthier coexistence with the natural environment.

Question 2 corroborates the need to address environmental issues, being confirmed by 79.4% of the teachers surveyed. Activities in Environmental Education should be present at all levels of education and modalities of the educational process, as a cross-cutting theme (PAULA, 2023), not constituting a specific discipline (MONROE; ANDREWS; BIEDENWEG, 2007), but as an integrated educational practice, involving all teachers, who should be instructed to include the theme in the various subjects dealt with in the classroom (FERRETTI; FRIEDE; MIRANDA, 2021).

The students' interest in Environmental Education subjects is demonstrated by 98.5% of the participants (Chart 3), even though 29.4% indicate momentary interest (level "sometimes" of the Likert scale). There are indications (GIASSI et al., 2016) that activities in Environmental Education in the school environment transform the attitudes of students, making them more peaceful and respectful with their colleagues and with the school heritage. Society changes with citizens who are more prepared to "face the challenges of today's society, whose biggest dilemma revolves around the solution of environmental problems, as they involve economic, social, natural resources, ethical aspects, among others" (GIASSI et al., 2016, p. 31). Possibly, interest in environmental issues will gain more adhesions when school projects can develop in students a critical stance on situations related to the environment, quality of life, and a healthy environment, that is, a critical stance in the face of reality itself (LAPA JUNIOR et al., 2023).

Regarding the interest of teachers in environmental issues, shown in Chart 4, the majority (80.9%) of the participants mentioned that they are "always" interested in the subject. It is important to highlight that this same finding was reported by Azevedo and Fernandes (2010) in their research on teacher interest in relation to the environment. However, a research carried out by Lima and Pato (2021) points out difficulties in teacher engagement in Environmental Education activities, such as: breaking with the disciplinary

tradition; the excessive number of students in the classroom, making it difficult to provide satisfactory service; a strong link between personal values and engagement in environmental projects; the lack of initial training, specifically the specific training of teachers, the broadening of the view in relation to the environmental theme; and the absence of good interpersonal relationships in the school, which also hinder teacher engagement in collective projects, as expected in those involving Environmental Education (LIMA; PATO, 2021).

The last analysis refers to the existence of Environmental Education content in the teachers' classes (Chart 5). Despite the interest in dealing with the theme shown in the survey, about 76.5% indicated that "sometimes" (32.4%) or "almost always" (44.1%) they address environmental issues in their classes, that is, it is not unanimous. Sometimes, teachers highlight the difficulty of finding time and complying with the curricular syllabus established in the official teaching documents within the class hours offered in the curriculum, as well as the lack of theoretical basis articulated with Environmental Education caused by the absence or non-existence of continuing education courses, offered by the bodies responsible for the education system (MARQUES; GONZALEZ; XAVIER, 2017). However, Marques, Gonzales and Xavier (2017) consider that some professors are comfortable for not looking for ways to suppress these difficulties in their disciplines. They cite that "Many of these difficulties are consequences of a fragmented view throughout teacher training, interfering in practice by objecting to the termination of conservative practices; emphasizing the desire to change, but without encouragement to remove vices" (MARQUES; GONZALEZ; XAVIER, 2017, p. 2).

CONCLUSION

Environmental education aims to awaken in society the awareness that everyone is part of the environment so that each one comes to play their role in the preservation of the natural environment, of which they are an integral part. Environmental Education came with the objective of awakening in each individual the critical awareness of the environmental problem, awakening participation either individually or collectively, in a responsible way in dealing with the environment, aiming at the quality of life present and future generations.

As a theme present in the national and global context, including the school environment, Environmental Education requires that its discussions be promoted from the perspective of the resignification of an education that is and is beyond the boundaries of

traditionality. The perspective of this Environmental Education is urgent and came to light in the face of the problems with the environment and the need to leverage a cohesive education focused on socio-environmental discussions, with primary attention to the human being.

In this sense, Environmental Education dealt with in the educational space, with prepared and cohesive professionals in favor of improving life in society, has many challenges to be overcome. It is necessary to break with isolated and punctual practices and with mechanistic and conservative education, allowing Environmental Education to be integrated into the school disciplinary curriculum.

It is proposed that the work contributes to the construction of new perspectives and new relationships, socially and environmentally sustainable.

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