

# Said and unsaid aspects of environmental education: statements of educators at the Universidade Federal de Sergipe – Brazil \*<sup>1</sup>

Aline Dortas Leal<sup>2</sup>

Orcid: 0000-0002-4654-528X

Aline Lima de Oliveira Nepomuceno<sup>3</sup>

Orcid: 0000-0001-7936-2167

## Abstract

Environmental Education (EE) is influenced by ideological dimensions that shape perceptions of the environment and guide behaviors related to it. Consequently, it is essential to explore the construction of discourses surrounding EE within the educational context, particularly in teacher training, through the insights of those involved in preparing future educators. This study aims to understand the meanings conveyed, both explicitly and implicitly, regarding EE from teachers at the Universidade Federal de Sergipe (UFS) in Brazil, considering the historical and social contexts that inform these perspectives. The theoretical and methodological framework of this research is rooted in French discourse analysis, following a Pecheutian approach. Initially, a structured questionnaire was distributed to educators responsible for EE curricular components in the undergraduate programs at UFS, followed by semi-structured interviews with these teachers. The analysis revealed that the interviewees' discourse on EE is diverse, shaped by their personal and professional experiences and enriched by memories of specific situations, as well as references to authorities in EE and related fields. In terms of the overarching political and ideological trends in EE, both pragmatic and critical discourses were identified. The pragmatic discourse appears to be influenced by the backgrounds and fields of expertise of the individuals expressing it, while the critical discourse extends beyond these boundaries. The concluding remarks emphasize the significance of fostering analyses and discussions regarding the meanings that circulate in society and education. This process is essential for uncovering and challenging the established perceptions and knowledge that affect how individuals think, (re)act, and learn about the world.

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\* English version by Antonio Bianchi. The authors take full responsibility for the translation of the text, including titles of books/articles and the quotations originally published in Portuguese.

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**2-** Secretaria de Estado da Educação e da Cultura de Sergipe (SEDUC/SE), Simão Dias, SE, Brazil. Contact: [alinedortas@gmail.com](mailto:alinedortas@gmail.com)

**3-** Universidade Federal de Sergipe, São Cristóvão, SE, Brazil. Contact: [aline\\_limadeoliveira@yahoo.com.br](mailto:aline_limadeoliveira@yahoo.com.br)



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## Introduction

Environmental degradation is driven by numerous factors, including deforestation and pollution of both natural and urban spaces, resulting from the waste generated by the high consumption of industrialized goods. This consumption feeds into a market that commodifies life itself. Within this framework, consumerism – the dominant paradigm of our global era – profoundly influences individuals, “[...] fostering a pseudo-familiarity with the dynamics of consumption while obscuring the ability to recognize the inherent inequalities present within this realm” (Nepomuceno *et al.*, 2021, p. 4).

In this context, the concept of “environment” explored in this research extends beyond merely the collection of biotic and abiotic components. We define the environment as “[...] the determined or perceived space where natural and social elements engage in dynamic relationships and interactions” (Reigota, 2010, p. 14). This perspective suggests that the environment is a dynamic process, not static or immutable, and it evolves in response to human groups and their beliefs and worldviews.

In this context, our understanding and actions regarding the environment are shaped by the historical and social context, which is influenced by a prevailing ideology. This ideology provides individuals with a system of evidence and meanings, which are perceived and experienced, ultimately constituting a reality that individuals come to accept as their own (Orlandi, 2020). Drawing on Althusser’s ideas (2003), which were further developed by Pêcheux (1995) in the context of French Discourse Analysis, ideology is understood as the imaginary relationship that becomes practical and helps reproduce existing relations of production. Thus, its existence is not merely abstract but embedded in the materiality of what is articulated and what remains unspoken. This framework supports a specific way of visualizing and understanding the environment, driven by the offerings of that environment, as a byproduct of the prevailing capitalist ideology. Additionally, it encompasses various perspectives shaped by distinct political and ideological affiliations, which foster alternative ways of viewing environmental and social issues.

The discourses that circulate within society illustrate how this ideological process takes shape. As Orlandi (2020) suggests, discourse serves as a dynamic mediator between individuals and their realities, facilitating both stability and continuity at times, as well as transformation and detachment from established norms at others. Therefore, discourse is not merely a matter of linguistic expression; it represents a social and historical construct that shapes both subjects and meanings.

In terms of the socio-environmental context, it is essential to recognize that there is an education system oriented toward the relationship between society and the environment, regulated by state laws that dictate educational practices as a matter of public policy. This framework is known as Environmental Education (EE), which, within

the legislative sphere, has evolved beyond being merely a topic of discussion in classrooms across various educational levels. It has established itself as a formative process and a distinct field of knowledge, complete with its theories, authors, and interpretations.

In 1999, the National Environmental Education Policy (PNEA) in Brazil redefined environmental education (EE) as a formative process aimed at developing values, knowledge, skills, and attitudes related to the human-environment relationship. Consequently, EE is grounded in a specific worldview influenced by governmental frameworks and is, in turn, interwoven with capitalist ideologies. This connection implies that it carries certain narratives and an ideological framework that stems from these influences.

In this regard, Layrargues (2020) asserts that environmental education (EE) constitutes a contested domain in which various mechanisms of symbolic oppression and cultural domination influence individuals' subjectivity, engaging in significant ideological persuasion. Consequently, it is a process deeply infused with discursive formations rooted in specific assumptions and vested interests, which generate meanings and shape ways of thinking and acting concerning socio-environmental issues.

Furthermore, because Environmental Education (EE) is an interdisciplinary field that does not adhere to a specific curricular component, promoting its discourses in a focused manner is the responsibility of those engaged in educational work. Teachers, students, advisors, and other participants in school education serve as "commentators" on the discourse prevalent in the realm of EE.

The teacher plays a crucial role in implementing a previously established curriculum, with a focus on developing knowledge and values. As a professional, the teacher is influenced by the discourses reflected in the regulations governing their profession as well as the perspectives outlined in official educational documents. However, it is essential to recognize that the teacher is also situated within a specific social, cultural, and historical context, shaped by various discursive conditions and the social environments that define their experiences.

In the context of teacher training, the situation assumes new dimensions, as it involves not only the roles that teachers play as professionals and ideologically influenced individuals, but also the continuation of interpretations among those in training, which they may carry into their future work. Consequently, through an ideologically and politically shaped educational environment, these individuals may remain tethered to the meanings produced and manipulated by the prevailing hegemonic order, thereby contributing to the perpetuation of the socio-environmental context of contemporary society. Alternatively, they may be encouraged to explore other meanings shaped by discursive formations that challenge the *status quo*.

Therefore, what meanings are conveyed through the discourses on Environmental Education (EE) by undergraduate professors at the Universidade Federal de Sergipe (UFS)? What historical and social conditions influence and shape their creation? Considering these research questions, we aim to achieve the following objective: to understand the meanings conveyed in both the spoken and unspoken sentiments regarding EE among undergraduate professors at UFS, informed by the historical and social conditions that govern their development.

The theoretical and methodological framework guiding this research is rooted in French Discourse Analysis (DA), based on the works of Pêcheux (1995) and Orlandi (2016, 2020). In the context of DA, language is not viewed as transparent; rather, it comprises more than what is immediately apparent on the textual surface. This perspective emphasizes the symbolic materiality of the text, highlighting the importance of understanding its meaning through both overt and covert expressions, while considering the context in which it was produced.

The focus of this research is the Universidade Federal de Sergipe (UFS) in Brazil, which stands as the only public university and the largest Higher Education Institution (HEI) in the state. We highlight the significant role that public universities play in society, as they maintain a vital connection to the capitalist mode of development by training a substantial portion of the professionals it requires. At the same time, these institutions serve as platforms for critiquing this mode of production and its associated practices. Consequently, they become spaces where discourses that both reproduce and challenge the dominant ideology coexist, often counteracting one another.

Initially, the curricular components of undergraduate courses that incorporate Environmental Education (EE) into their syllabuses were analyzed using the Integrated Academic Activities Management System (SIGAA) at UFS. During the 2022.2 academic term, the instructors responsible for these components completed a questionnaire aimed at characterizing their profiles in terms of age group, educational background, qualifications, relationship with EE, years of experience in teacher training, and the specific components they teach. Out of the 15 questionnaires sent via email to the teachers, six responses were received.

The six teachers who completed the questionnaire participated in semi-structured interviews, which were conducted both online and in person, depending on the participants' availability and preferences. The discussions that emerged from these interviews formed the corpus analyzed through Discourse Analysis (DA), examining the interplay between the texts, the discursive processes they embody, and the social and historical context that underpins their creation.

It is essential to highlight that the involvement of these individuals in the research received approval from the UFS Research Ethics Committee, as indicated by opinion No. 5,959,202. Participation was contingent upon the signing of the Free and Informed Consent Form (FICF), which ensured adherence to the ethical guidelines necessary for conducting studies with human subjects and informed participants of the research objectives. Additionally, efforts were made to protect their identities by omitting their names and managing any information that could lead to identification. Consequently, we assigned a coding system using the letter P followed by a serial number for identification purposes: P1, P2, P3, P4, P5, and P6.

The following section provides a concise overview of EE as a public educational policy in Brazil and its relevance in teacher training. The subsequent portion presents key information gathered from the questionnaires, characterizing the context of the participating teachers. Next, we conduct a discursive analysis that uncovers both the

articulated and unspoken perspectives of these educators. Finally, we will revisit the main findings and reflections presented in the concluding remarks.

## **Environmental Education and Teacher Training: (Mis)paths in (Dis)course**

In Brazil, Environmental Education (EE) was first prominently defined through the National Environmental Education Policy (PNEA) established by Law No. 9,795 on April 27, 1999. This policy conceptualizes EE as a process that incorporates society's values, knowledge, skills, and behaviors – both individual and collective – to promote environmental conservation (Brasil, 1999). This definition extends beyond merely viewing the environment as a collection of natural resources; it emphasizes a sense of collective responsibility that integrates both theoretical and practical aspects related to socio-environmental issues. As a result of this framework, EE has been recognized as an essential component for incorporating environmental principles into Brazilian education across various levels and modalities, encompassing both formal and non-formal education (Brasil, 1999).

In 2012, the National Curricular Guidelines for Environmental Education (DCNEA) were approved with the objective of “[...] encouraging critical and proactive reflection on integrating Environmental Education into the formulation, implementation, and evaluation of institutional and pedagogical projects within educational institutions [...]” (Brasil, 2012, p. 2). These guidelines aim to establish Environmental Education as a fundamental component of the curriculum, rather than merely distributing content across its various elements.

To establish a unified curriculum for all levels of school education, the National Common Curricular Base (BNCC) was introduced in three versions: the first between 2015 and 2016, the second in May 2016, and the third in 2017, which serves as the current iteration. This document serves as a mandatory reference for developing specific curricula in basic education, considering the unique characteristics of each educational institution. Among the three versions of the BNCC, only the second (from 2016) acknowledges environmental education (EE) as a vital component of school education, outlining its objectives and functions. The other versions merely touch on the cross-cutting approach to environmental issues and related topics, such as sustainability and consumption, aimed at fostering knowledge and skills that encourage students to engage respectfully and responsibly with the environment.

The current BNCC does not recognize Environmental Education (EE) as a formative process; it merely references essential skills and knowledge that pertain to the environment, either directly or indirectly. The approach taken is rooted in conservationism and pragmatism, reflecting the prevailing socioeconomic model. It aims to instill in students the belief that it is possible to continue exploring the environment with less aggression. The expectation is that students and their communities will alter their habits and strengthen their connection to the natural world. This perspective is considered legitimate, as it aligns with the directives of societal governing bodies and reflects the pragmatic political

and ideological trends in EE. As noted by Layrargues and Lima (2014), the focus is on prescribing the behaviors, attitudes, and values essential for environmental conservation.

The strategy involves attributing the responsibility for both the causes and consequences of environmental degradation to individuals, while narrowly framing the issue as one of waste production and accumulation (Layrargues; Lima, 2014). This perspective complements the educational model proposed by the BNCC, which is characterized as technical, instrumental, and focused on the skills necessary for profit-oriented work. These ideological influences, along with the tensions and differences they create, shape the concept of human development being pursued (Albino; Silva, 2019). Consequently, educational processes and knowledge that could encourage students to reflect and explore alternative understandings of the world are often overlooked.

In 2019, the CNE/CP Resolution No. 2, dated December 20, 2019, was enacted, outlining the National Curricular Guidelines for Initial Teacher Training in Basic Education and establishing the Common National Base for Initial Teacher Training (BNC-Training). As highlighted by Albino and Silva (2019), the BNC-Training adopts a competency-based curriculum model for teacher training, which simplifies knowledge into frameworks and models to align with a global demand that often overlooks the specific realities of the country, particularly regarding the educational practices in local schools.

Immersed in this context, the relationship between society and the environment is revealed as a straightforward matter of adjusting the processes of production, usage, and disposal of products. This perspective relies on a dichotomous thinking model that overlooks the complexity of reality, often reflected in various pedagogical practices in schools (Nepomuceno *et al.*, 2021). In this regard, studies on teacher training in Environmental Education (EE) (Tristão, 2004; Araújo, 2004; Guimarães, 2004) and the EE discourses of teacher trainers (Pitanga, 2015; Silva, 2016; Zaions, 2017; Pasin, 2017) indicate that specific actions have not been adequate to integrate the socio-environmental dimension into the curriculum or to institutionalize EE, as they keep it focused on a conservationist perspective based on ecology and solid waste management, which appears in replicated meanings in the discourses of teacher training teachers.

This limitation highlights a discrepancy between urgent socio-environmental challenges and the teacher training promoted by curricular policies (BNCC and BNC training), which undermines the establishment of Environmental Education (EE) as a central element of Brazilian education. It is crucial to note that the BNCC establishes a learning standard for Brazilian education, which is applied not only in Basic Education but also in Higher Education. This standard aims to develop specific skills and competencies within the overall training provided by the educational system. Unfortunately, EE remains marginalized, often overlooked, or diminished within the school curriculum. To address this situation, a thorough review of these documents is necessary to ensure that EE is recognized as a transversal priority, fully integrated into training processes and pedagogical practices.

Considering the challenging context, teachers must navigate the priorities outlined in guiding educational documents. At the same time, they find themselves deeply embedded in various environments shaped by their unique experiences, which influence their perspectives on teaching and learning. Therefore, it is crucial to understand who



these educators are and the contexts from which they articulate their thoughts on Environmental Education (EE). This understanding will help unveil their perspectives that perpetuate within the practices they uphold.

### **Who are the subjects of the said and unsaid aspects of Environmental Education, and where do they speak from?**

The teachers participating in the research comprise a heterogeneous group in terms of their personal characteristics, training, and professional performance, which function as external conditions that influence their discourses on EE.

In terms of personal characteristics, the group comprised four women (P1, P2, P5, and P6) and two men (P3 and P4). Five members identified as white, while only P2 indicated mixed race. Age-wise, the majority (four individuals) were between 36 and 47 years old, while P2 and P3 were 58 and 65 years old, respectively. Notably, there is a correlation between the presence of women in the group and their respective fields of training and professional engagement. In a seminal work on the feminization of teaching, Dermatini and Antunes (1993) argue that, historically, the teaching profession has been predominantly associated with women, who were perceived as naturally suited to impart knowledge on morals, religion, and domestic subjects. In contrast, men were typically entrusted with the more complex and significant content, such as geometry and arithmetic.

Over time, women's roles in education became primarily associated with early childhood education, which required training at a Teaching Technical School. This was essentially the only pathway available for women to pursue further studies at the end of the 19<sup>th</sup> century, as higher education was predominantly reserved for men (Dermatini; Antunes, 1993). Consequently, early childhood education was perceived as a duty primarily associated with women, linked to their inherent maternal qualities. This perspective is evident in the significant presence of women in Pedagogy courses.

This panorama is deeply rooted in the androcentric foundations of society, which manifests in the segregationist way science is perceived and practiced. Medeiros and Barretto (2022) argue that science has traditionally been regarded as a domain primarily for men, based on assumptions that ascribe characteristics such as rationality and objectivity as innate to them. This phenomenon is particularly evident in the Exact and Natural Sciences, including Mathematics, Physics, and Chemistry, as these fields enjoy legitimacy and status due to their alignment with the assumptions.

This scenario is evident at the Universidade Federal de Sergipe (UFS), as indicated by the teachers who participated in this research. Among them, two women hold degrees in Pedagogy, one in Biological Sciences, and one in Dance, while the two interviewed men possess degrees in Biological Sciences and Chemistry. This underscores the persistence of gender segregation in the fields of science and education, while also highlighting the expanding scope of women's teaching careers in higher education.

Although in different areas and trajectories, all participants hold a degree, which is essential when considering these subjects, given their diverse memories and experiences as students and teachers, sometimes assuming these roles simultaneously, and as teachers who train other teachers.

In this context, the relationship between initial and ongoing education and one's professional field emerges as a significant issue. Notably, only P5 lacks a degree in the area in which she teaches; the other educators instruct in subjects aligned with their initial training. It is worth noting that this teacher obtained her credentials in Geography, the subject she currently teaches, through ongoing professional development. In their reflections, Corrêa and Castro and Amorim (2015) highlight remediation and supplementation as characteristics often imposed on continuing education in Brazil. The authors, however, assert that such education should instead empower teachers with the autonomy and confidence to manage their professional development, serving as a space that fosters a reflective and creative exchange between established knowledge and evolving experiences.

When asked whether they had ever participated, as students or teachers, in a course focused on the relationship between society and the environment or Environmental Education, five individuals responded affirmatively, while one answered negatively (P6). Notably, the three who elaborated on their participation explicitly referred to their roles as teachers in undergraduate and graduate courses. This highlights a significant gap in their experiences as students in both initial and continuing education related to Environmental Education. Such an observation contradicts the guidelines outlined in the DCNEA, which, in Article 11, recommends that "the socio-environmental dimension should be incorporated into the curricula of both initial and continuing education for education professionals, taking into account the need for awareness and respect for the multiethnic and multicultural diversity of the country" (Brasil, 2012, p. 3).

Finally, the inquiry focused on whether the academic training received (both undergraduate and postgraduate) offered the necessary theoretical, methodological, and experiential support for engaging with concepts, ideas, and reflections on the interplay between the environment and society within pedagogical practice. Out of six responses, only one was negative (P2), while the others acknowledged that preparation was indeed present, albeit at varying levels.

P1 compared it to their performance in EE, indicating that both occurred and continue to occur transversally. This relationship between training and performance in EE was also observed in P3, P4, and P5, who, in their statements, point out the insufficiency of the subsidies offered by training and, given this, the taking of individual attitude to feel prepared, through studies and practices inherent to the profession, configuring the self-training and/or continuing education on which Corrêa and Castro and Amorim (2015) reflect as a result of the deficiencies still present in teacher training courses in Brazil.

Starting from these places that, although heterogeneous, touch on specific points originating from the same educational system, the voices in which the said and unsaid of EE echo are evoked, the analysis of which is presented in the next section.



## **What is said and unsaid by the teaching voice: teachers' discourse on Environmental Education**

The discourses examined in this analysis emerged from the questions that were either prepared in advance or generated during the interviews, addressing various themes related to EE. Initially, participants were prompted to engage in a reflective exercise in which they recalled and described a situation or event significant to their relationship with EE. This reflective exercise was described by the participants as a spontaneous aspect of their discourse, underscoring the contrast between a pre-prepared account and one that naturally unfolds. This was evident in their statements: “[...] I’m working on it now; perhaps it will be confusing” (P1); “I never thought about it, so I’ll try to imagine” (P6); “But that’s also a reflection I’m doing right now” (P6)<sup>4</sup>.

Such expressions illustrate how the immediate context is activated within the discourse, serving as a condition for production. It is the questions posed at that moment, framed as an interview, that prompt the responses; these responses would not emerge in the same manner in a different communicative context.

A predominant theme in the reported situations is the academic environment, which serves as the primary context. The participants’ engagement with their chosen courses for initial training is noteworthy, as the theoretical and practical components provide opportunities for interaction with environmental issues. This occurs either through direct exploration in the course activities or as a countermeasure to the lack of such focus. Similarly, Pasin (2017) identified the trajectory of training and professional performance as a crucial factor in shaping the meanings conveyed by the interviewed teachers.

In the interview with P5 and P6, the discourse revealed a strong interconnection between personal, formative, and professional spheres, with a prominent focus on individual experiences with the environment. P5 remarked, “[...] this environmental issue truly permeates my entire education. I have always maintained a deep bond with nature, which is why I chose to pursue a degree in Biology.” This suggests that there was an expectation of discovering answers or enhancements to an existing relationship; however, the teacher expressed that the field of Biological Sciences tends to be fragmented and confined to its specific knowledge base, offering limited support for contemplating relationships with the environment.

In the case of P5, the expectation was more effectively fulfilled in Geography. In her speech, she emphasized that this shift in her educational path is not merely a change of focus, but represents an alignment with her beliefs—a crucial step in achieving professional satisfaction as both a teacher and a researcher. Similarly, P6’s speech highlights significant connections between her life history, her perspective on environmental education, and her pedagogical practice. This teacher shared that her initial encounter with environmental issues began while she was living in the South region, where she took up mountaineering. It was during this time that a forest fire broke out on a nearby mountain, prompting mountaineers to rush to the scene with water in hand to combat the flames.

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**4-** The statements of the interviewed teachers were transcribed as they were spoken, maintaining neologisms, slang, and abbreviations, and respecting the style used.

In P6's speech, we highlight what remains unspoken: Dance, identified as the domain from which the discursive subject originates, is an area seemingly disconnected from environmental issues. However, through the experience of this episode, a trajectory of research and professional activity has been developed, centered on the interplay between the body and the environment. It is essential to note that, while this reported episode marked a significant turning point (P6), the exploration of these themes has also been influenced by personal experiences, particularly those from his hometown, which is characterized by a culture of environmental preservation.

P6's speech reflects a strong commitment to the values upheld in the various groups and contexts of interaction during these experiences, particularly regarding the importance of proper garbage collection and disposal. These principles are harnessed to define Environmental Education (EE) within the unconventional framework of the Dance course, highlighting the challenges of fostering a healthier relationship with the environment. Moreover, some of these values also express a critical perspective on social reality. P6 notes that "the segment of the population with the least access suffers most directly from lack of choice, which is tied to purchasing power." This statement highlights the environmental injustice prevalent in Brazil, stemming from a capitalist socioeconomic structure that undermines social rights while promoting practices that disproportionately affect those without the means to protect themselves (Loureiro, 2020).

In our analysis and discussion of the discourses of the undergraduate professors we interviewed, we sought their perspectives on Environmental Education (EE) as an institutionalized training process today. A clear predominance of the pragmatic macro trend emerged from this theme, characterized by a focus on adopting behaviors, particularly in the realm of solid waste management. The teaching profession, along with the specific area of knowledge on training and performance, as well as the curricular components taught, serves as the primary regulatory framework for these discourses. This framework significantly shapes the perspectives and assertions regarding EE.

In P4's speech, he described how his engagement with environmental issues emerged after he became a teacher, driven by his concern for the connections that the educators he trained would forge with society. For P4, teaching catalyzed his quest for knowledge about environmental matters, which he found lacking during his Chemistry training. He noted, "[...] there were discussions about waste treatment and reducing environmental contaminants. We learned techniques for analyzing contaminants, [...] but there was little focus on broader environmental issues" (P4).

Chemistry is a field that is heavily oriented toward industrial production, generating insights for the creation of various materials used as raw resources across different industrial sectors. This is achieved through the study, extraction, and transformation of nature-derived resources (Pitanga, 2015). Within this framework, P4's speech suggests that the treatment of waste and contaminants is treated as an issue separate from environmental concerns. It presents the environmental perspective as a body of ecological knowledge that falls outside the traditional boundaries of Chemistry.

Therefore, in alignment with the pragmatic macro trend identified by Layrargues and Lima (2014), the meanings conveyed in this discourse advocate for the perspective that science and individual behavior serve as essential avenues for addressing environmental issues. This is particularly evident in the attitudes toward waste production and disposal, emphasizing the reliance on technological and scientific advancements to substitute more harmful options with less aggressive alternatives.

Similarly, P3 reflects a perspective that confines Environmental Education (EE) to the realms of conservation and problem-solving, drawing upon his background in Biological Sciences. He believes that the resolution of environmental issues lies within governmental action through public policies, thereby maintaining control among those who already possess power and hindering any meaningful change in the established socio-environmental order. His insights suggest a systemic understanding of environmental challenges, aiming to connect various aspects of specific problems, yet they do not delve deeply into the underlying structures of society.

In P6's discourse, meanings associated with pragmatic Environmental Education (EE) are also invoked, particularly regarding the need to restrict EE to safeguard the planet due to the detrimental impacts and harmful relationships humans establish with their environment. To support this viewpoint, the teacher references her master's advisor, stating, "[...] the greater the complexity of the species, the greater its field of destruction" (P6). In alignment with this perspective, she adds, "[...] we already cause a much greater impact through our organization of life" (P6).

This discourse maintains a strictly biological focus, overlooking the diverse social frameworks through which humans interact with their environment, an interaction that is not always detrimental. In this context, we reference Loureiro (2020, p. 135-136), who argues that this perspective complicates our ability to critically analyze reality by "[...] attributing a universal and timeless quality to destruction, treating it as a uniform experience across all historical periods, which promotes fatalistic and immobilizing discourses."

In the same speech by P6, Environmental Education (EE) is linked to normalizing attitudes towards waste management, such as garbage separation. This process of EE is portrayed as practical and accessible, particularly for children, who "do not need great elaborations, great theories" (P6). Hillesheim and Guareschi (2008) argue that childhood is a social construct that emerged from Modernity, when it became a subject of discourse. Within this context, the control and normalization of children within power relations are defined in contrast to those of adults, highlighting their perceived deficiencies. Since childhood is viewed as an incomplete construct, adult guidance and regulation are needed.

We associate this ideological framework with the discourse that champions the preservation of childhood innocence, viewing children as individuals who must be safeguarded from the harsher realities of the world. This protection manifests in various ways, one of which involves the simplification and manipulation of the information presented to them, thereby maintaining their understanding of the world in a superficial and harmonized manner. The phrase "because yes" is frequently used to evade a child's

question, capturing these sentiments and functioning as a means of control through the denial of access to an understanding of reality.

In the speech delivered by P6, there is an implication that the child cannot comprehend certain concepts and theories deemed sophisticated and complex for their age. This perception aligns with a biological discourse that categorizes childhood into stages and conditions regarded as natural. It suggests that there exists “[...] a singular notion of being a child, overlooking the variances of gender, social class, race, ethnicity, religion, and nationality. In essence, it reflects a perspective on a child’s essence or nature” (Hillesheim; Guareschi, 2008, p. 76). Consequently, P6’s remarks underscore the authority of science in defining what it means to be a child, dictating what a child can learn, and determining what is deemed relevant or irrelevant to him or her.

In contrast, P1 expresses concern about the tendency to underestimate children’s abilities, stating, “[...] we often think, ‘I’m not going to tackle that because it’s too difficult.’ It’s essential to stimulate children’s curiosity” (P1). This reflects a critique of the prevalent approach in early childhood education that focuses solely on simplistic tasks. Such a superficial method often found in pedagogical practices related to environmental education contributes to a “[...] cognitive, social, political, economic, and cultural stagnation regarding the subject” (P1).

The speech of P1 critically examines the influences and mechanisms of hegemonic capitalist logic that shape our understanding and experience of socio-environmental relations. Throughout the interview, P1 addresses not only this topic but also others, highlighting the meanings that arise in response to market manipulation. Furthermore, P1 advocates for transformative actions that can reinvent individuals as engaged citizens within the contexts they inhabit and the positions they assume regarding reality.

We connect this discourse to the influence of the teacher’s educational journey, which began in the field of Journalism—a discipline centered on the pursuit of facts, their dissemination, and the critical questioning of information. This relationship between the teacher’s initial training and the development of a critical perspective on socio-environmental issues is highlighted by P1, who reflects on the past with a renewed understanding. This perspective is shaped by their current roles as educators and researchers, where they engage in a critical examination of reality, now equipped with a deeper framework to support this endeavor more effectively.

This insurgency against the influences and mechanisms driven by hegemonic thinking is also evident in P5’s speech. Ongoing education in geography appears essential for this, as it provides a more comprehensive understanding of Environmental Education (EE) that extends beyond the environmental realm, incorporating social and political dimensions, unlike the ecological focus typically found in the biological sciences. Building on this foundation, the speech delved into a critical analysis of the political and economic situation in Brazil from 2016 to 2022, which was characterized as

[...] a setback in both environmental and political terms, a regression of at least six years. It reflects a prioritization of a different kind of right—one that values financial gain, individualism, and dishonesty. If impoverished individuals are suffering, it is often regarded as their own issue (P5).

This contextualization works as an argument for EE as the teacher conceives it today: “[...] revolutionary education, of respect for all beings, of seeking balance and less social inequality” (P5).

Therefore, in delineating the heterogeneity of the discourse, P1 and P5 articulate meanings that align with the critical macro-trend of Environmental Education (EE). As Loureiro (2010, p. 17) notes, this approach “...is rooted in a radical questioning of the social conditions that give rise to environmental problems and conflicts.” Layrargues and Lima (2014) further assert that for critical EE, it is insufficient to merely pursue a new culture in the relationship between humans and the environment; instead, it is vital to advocate for a new society through a multidimensional renewal encompassing knowledge, cultural and ethical values, social and political relations, as well as institutions and systems.

In this perspective, based on Pêcheux (1995), the speeches of P1 and P5 exhibit a counter-identification of the discursive subject with the universal subject—someone endowed with the authority to judge, enforce laws, and thus, holds the truth deemed legitimate. This aligns with the notion of the “capitalist subject, whose mandate is to equalize to dominate more effectively, thereby better subduing individuals as potential consumers” (Tfouni; Tfouni, 2014, p. 118). The meanings articulated in these speeches stand in opposition to this concept, embodying what Pêcheux describes as “the bad subject.” It is expected that these teachers, when subjected to the scrutiny of the official discourse articulated in the legislative documents governing education, would reproduce the ideological apparatus legitimized in their statements. However, rather than conforming, the meanings they express challenge and question the prevailing views supported by the overarching pragmatic trend of EE.

The data and discourses analyzed reveal that the limitations in the processes and documentation for training teachers in Environmental Education (EE) are not restricted to the Universidade Federal de Sergipe (UFS). Research conducted by Silva (2016) and Zaions (2017) supports this view, indicating that similar challenges are present in other higher education institutions across Brazil. This scenario reflects a broader issue concerning the organization of courses and the emphasis on the socio-environmental dimension in teacher training. It underscores the necessity for institutional initiatives that foster a greater integration of this perspective into university curricula, allowing educators to engage with diverse viewpoints and reflections on EE.

## **Concluding remarks**

This research provided insight into the intricate web of meanings that encompass socio-environmental issues, as well as teaching and learning. At this crossroads, various challenges facing socio-environmentally focused teacher training were brought to light, particularly the diminishing presence of Environmental Education (EE) within the guiding documents of Brazilian education, notably the Base Nacional Comum Curricular (BNCC - Common National Curriculum Base) and the Base Nacional Comum (BNC- Common National Base) training.



The structuring logic of curricular documents and educational systems significantly influences the persistence of both explicit and implicit discourses surrounding Environmental Education (EE). This influence operates in two primary ways: first, by reinforcing the pragmatic macro trend, which confines discourses to the specificities of training areas and promotes fragmentation through modern science, thereby limiting the integration of social, political, and cultural perspectives; second, by contrasting with the critical macro trend that aims to transcend these boundaries. This critical approach emerges from an expansion of the specific knowledge encompassed in teacher training programs and curricular components, fostering a proactive response to pressing socio-environmental, political, and economic challenges. Within this framework, personal experiences and individual narratives play a pivotal role, enabling the development of perspectives that disrupt the naturalized conceptions upheld by hegemonic capitalist logic.

The discourse of the interviewees on Environmental Education (EE) is deeply influenced by their personal and professional experiences, as well as their recollections of specific situations. This is evidenced by their references to authorities in the field of EE and various domains of diverse knowledge. This perspective underscores the significance of considering historical and social contexts to comprehend contemporary socio-environmental relationships and their incorporation into educational processes that extend beyond mere linguistic expression.

The relationship between universities and socio-environmental issues is notably limited, particularly in the courses attended by the interviewees. This constraint is also evident in the historical organization of university departments, centers, and institutes, which often prioritize specificity at the expense of diverse perspectives. In this context, it is crucial to consider the role of universities in teacher training, as the concepts developed in these educational spaces have both direct and indirect impacts on teaching practices. Furthermore, it is vital to promote ongoing processes of teacher professionalization that emphasize the socio-environmental dimension, particularly for educators who are directly involved in this training process, especially at UFS, where the interviewed teachers are situated.

It is important to note that the sample utilized in this study is both limited and specific to the Universidade Federal de Sergipe (UFS). This suggests that the analyses and conclusions drawn here are relevant only within this context and cannot be generalized to the national level. However, this limitation does not diminish the significance and scientific value of the research, as the theoretical engagement and analysis enabled the achievement of the set objectives and prompted meaningful reflections on the role of EE in teacher training throughout Brazil.

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**Aline Dortas Leal** is a Portuguese Language teacher at the State Secretariat for Education and Culture of Sergipe (SEDUC/SE), holds a Master's degree in Education from the Universidade Federal de Sergipe, and is a member of the Environmental Education Study and Research Group of Sergipe (GEPEASE).

**Aline Lima de Oliveira Nepomuceno** is a professor in the Biology Department of the Universidade Federal de Sergipe (UFS) and the Graduate Program in Education (PPGED – UFS), holds a PhD and a Master's degree in Education (PPGED – UFS), a Bachelor's degree in Biological Sciences (UFS), and is a member of the Environmental Education Study and Research Group of Sergipe (GEPEASE).