

## The practice of environmental education starting from the extension program Humaniza Bosque Carlos Belarmino (HBCB), Guarabira, Paraíba



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### ABSTRACT

Geographic Science has an assorted and diverse scope of analysis. One of the characteristics of geographic studies are the practices that can come forth from many contents studied in the classroom. Research and extension projects, in addition to enriching learning, favor the expansion of practices in relation to the environment in which students are included. The Humaniza Bosque Carlos Belarmino – HBCB extension project initially arises with the aim of managing and conserving an area within the Centro de Humanidades (CH) of the Universidade Estadual da Paraíba – UEPB. Currently, the project has become a program that houses more than 50 people, including teachers, students and volunteers, developing the tophophilia of those who regularly visit these spaces. The program has 8 Environmental Education – EA projects taking its practices to more than 20 schools and communities, located in several municipalities polarized by the CH. The objective of this article is to present the practice of EA from the HBCB/CH/UEPB Extension Program. The methodology used was participatory and shared, with the scheduling of visits to interested schools and communities, as well as the activities developed within the HBCB space. The space has been well used and the proposed practices have had excellent acceptance from the university community and surrounding communities, who have become interested in applying EA practices in their municipalities, schools, streets and houses. In this way, it is understood that the extension work developed in the HBCB/CH/UEPB program contributes to strengthening education, developing sustainable environmental practices, strengthening the human/environment link, through tophophilia.

**Keywords:** Geography, Environmental Education, Topophilia, Sustainability.



## 1 INTRODUCTION

The twenty-first century has intensified and deepened discussions on environmental issues and problems. An attention permeated, in large part, by proposals for management and management of practices in relation to nature. Oliveira (2017, p. 8) tells us that "new ways of imagining, thinking and doing Geography have emerged, based on the experiences, both objective and subjective, that the human being has of everything that surrounds him".

It is pertinent to point out that, currently, the world's population has become mostly urban. This is present in the techniques of manipulation and transformation of spaces, which mirrors the material cutouts impregnated in the landscape. For Moreira (2020, p. 67) "the progress of development of human societies is a continuous storage." The risks arising from this undue and predatory action culminate in the collapse of spaces and the consequent affectation of social groups.

This theme gains global strength from proposals developed with the aim of mitigating the negative impacts in relation to environmental practices. During the Rio 92 conference, the 179 member countries signed agreements for the protection and management of the environment. In this way, validated by the United Nations, the 2030 Agenda and the Sustainable Development Goals (SDGs) were implemented. (GARCIA and GARCIA, 2016)

This makes us reflect on the spatial dynamics, and question our role in this dynamic in relation to the landscape. Moreira (2020, p. 101) ponders: "space is socially saturated and now it is necessary to restructure it, in order to accommodate the broader scale of complexity that invades it". In this sense, landscapes take on new dynamics and formats, their uses and functionalities depend on the time and the group that interacts in the place.

In addition to all the environmental problems already known and faced, in 2020 we were surprised by a brutal pandemic, which forced the world to rethink the way we act in space. As Tuan (2005) writes, a landscape of fear was established, establishing rules of coexistence and isolation. The fear of disease dictates the organization of society, since, unlike a natural disaster, disease generates an atmosphere of panic and suspicion.

In this context, the world is reorganizing and restructuring itself in this new century, to meet the dynamics provided by an increasingly aggressive society with unbridled levels of consumption. This harmful perspective that presents itself, especially with the practices in relation to the landscape, requires a new way of thinking and organizing spaces for collective use. "A Geography of lived spaces recognizes and seeks to reveal the role of intermediation of everyday life and spatial representations" (Serpa, 2019, p. 84).

Thinking about ways to slow down environmental impacts leads small local groups to devise strategies for the control and sustainable use of these spaces. Awareness involves education that



involves environmental issues and dynamics, making human groups understand that they are an active part of the dichotomy protection/destruction of the environment.

Thus, in 2019, Humaniza Bosque – HB was created, designed and organized by professors Dr. Carlos Antônio Belarmino Alves and Dr. Luciene Vieira de Arruda. Initially, with the proposal of management and conservation of the vegetated spaces of the Humanities Center – CH – Campus III of the State University of Paraíba – UEPB. In 2020, during the pandemic, Professor Carlos was affected by Covid-19 and died, which led to the change of the initial name to Humaniza Bosque Carlos Belarmino – HBCB, in his honor.

Today, with 4 years of activities developed, it has already been possible to expand its scope to other areas, involving teachers, students, schools and part of the community in its area of operation. The course of Letters and Pedagogy, as well as the technical-administrative part of the CH, are also involved in the activities of the HBCB.

In its initial phase, the HBCB program had only two projects to be developed. Over the years, even in the midst of a pandemic, there has been an exponential growth in activities and participants, which has led to the transformation of initial projects into an Extension Program, with 8 projects under development and more than 50 people involved. In this context, the objective of this article is to present the practice of EE from the HBCB/CH/UEPB Extension Program.

## 2 METHODOLOGY

The purpose of this article is to bring a connection between education and practices in relation to landscape. For Oliveira (2021, p. 10)

Teaching, as professionalism, is composed of dimensions that complement each other in a non-hierarchical way. From the initial formation, it is important to understand that there is knowledge that is specific, that is the basis, that permeates the understanding of how to teach a certain geographical content, which is articulated in the relationship between theory and practice, school and university.

Thus, the main objective of HBCB projects is to establish sustainable practices in relation to landscapes, boosting the practice of theoretical contents seen in the classroom, its applicability in the social context, in addition to geographical practices and processes.

The methodology is fluid and varies according to the theme of each project, taking into account the perception and experience of the actors involved in the processes. The dynamics used for this work had phenomenological bases, from the perspective of topophilia, with a focus on issues related to the lived space. For Tuan (2012, p. 135/136) "topophilia is a neologism, useful when it can be defined in a broad sense, including all the affective ties of human beings with the material environment".



The research is conducted by each advisor individually, but the basis for the development of the studies, the literature, the research and the work developed, are structured in the dynamics, environmental problems and sustainable use of the natural environment.

### 3 THEORETICAL FRAMEWORK

Environmental issues have been a matter of concern in our society. The increasingly aggressive practices of use of natural resources show the need to stop and look at the current established dynamics. Moreira (2020) warns that geographic space is produced and, therefore, nature has the concreteness of social production, which transforms and dimensions it as a socio-spatial category.

The reflection on the theme proposed here tells us that we are increasingly disconnected from nature and the reality that presents itself. The perception about the dynamics established by human groups with the landscape demonstrates that they believe in a subservient nature. It's as if we no longer belong to the ecosystem and can control it at will. To Olive Tree *apud* Marandola Jr., Cavalcante (2017, p.27):

In order for environmental perception to occupy a prominent place among the current priorities, we need more research and methodological studies. We need to develop an environmental awareness by developing an ethical and affective attitude towards the environment.

The environmental dynamics were completely changed in 2020, when we were surprised by an event never seen before: the Covid-19 pandemic. Nature, while showing signs of exhaustion, struck human groups quickly and violently.

And that forced the world society to remain in social isolation. Suddenly, the entire structure of a routine was changed, giving the impression that one of the gears in the wheel of life had been broken or damaged and we were faced with a new perspective that we never imagined living (Belizário *et al*, 2020, p. 275).

The human groups were stunned and frightened, not knowing how to deal with this strange new situation that presented itself. According to Tuan (2005, p. 166):

In a natural disaster such as a flood, the authorities and the populace were fighting an external natural enemy. In an epidemic, human beings themselves were the greatest cause of fear. The terror of contagion could so disturb reason that, to those in good health, the sick seemed not only victims of the disease, but the perpetrators.

In addition to all the issues to be thought about in terms of sustainability, there is unbridled consumption, large-scale waste production, air and water pollution. reveal a dangerous component to the collapse of the environment. It is necessary to think about strategies that aim to mitigate the indiscriminate use of natural resources. Arruda *et al* (2020, p. 283) tell us that:



The search for alternative and renewable energies is also already a reality, such as solar and wind energy. All that is needed is for the idea to be adopted by government agencies and large construction companies in their engineering projects; that the works take place through an interdisciplinary team, also involving sociologists, environmental engineers, geographers, biologists and ecologists, in search of environmental balance. An awareness process will be necessary for a change in attitudes and values to occur, in order to support the industry committed to the environment and despise those that are against sustainability. It is necessary to make it easier so that the next generations can adapt to conscious consumption and the return that will be given to nature. Thus, the conscious consumption of water and the reduction and disposal of garbage, two of the greatest current concerns.

Reinforcing the above-mentioned thought, it is necessary to raise awareness among agencies and entities for the adoption of control measures for the use of natural resources. In addition, it is necessary to apply policies in educational environments that work on the importance and awareness of students for environmental issues, involving them, whenever possible, in the organization of spaces close to them within the community. It is up to teaching environments – schools, courses and universities – to teach human values, environmental care and sustainable practices in relation to the landscape (Arruda and Lima, 2018).

Thus, EE strategies were designed to work with university students as a vehicle for information and action in favor of sustainability.

#### 4 RESULTS AND DISCUSSION

The theme proposed in this article articulates education, sustainability and environmental perception. It is necessary to create spaces for debate, "in a dialogue that includes reflection for Geographic Education to contemplate the physical-natural theme, in an inseparable way" where connections are established through the perception and experience of physical factors and the social actors involved (Oliveira, 2021, p. 09).

The path taken for the implementation of the HBCB was arduous and full of difficulties. From this perspective, the activities of the Humaniza Bosque – HB project were initially conceived. Born in 2019, it aimed to afforest, manage, and manage the spaces of UEPB's Campus III, based on the perception that "environmental impacts are the result of a vast exploitation of green areas and that they are not rehabilitated in the same proportion as degradation" (Silva, 2022, p. 14).

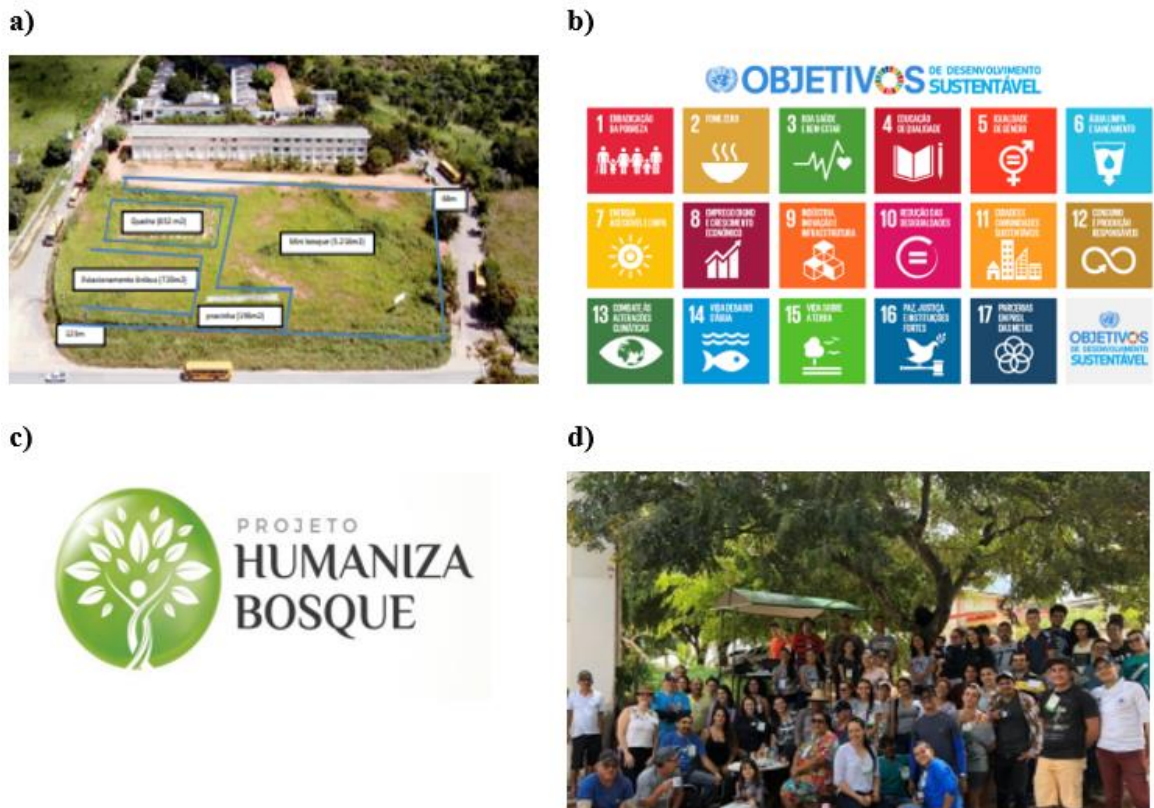
Concerned with reversing the situation in which the planet finds itself, at the end of 2015 the UN launched the 2030 AGENDA, that is, a global agenda aimed at sustainable development between 2015 and 2030. The main instrument of this new agenda is the 17 SDGs, shown in figure 2. These goals were created through a process of consultation, listening to several countries around the world. The 17 goals are linked to 169 goals and 231 indicators that, by 2030, should be discussed and worked on with the three sectors of society: social, economic, and environmental (Silva, 2022, p. 20).



Deepening this discussion and applying the bases to the reality we have, we worked in an unused area of the HC where the implementation of techniques to vegetate the place and encourage its use by the students began.

In photographic record 1 we present: (a) Front part of the CH/UEPB and initial planning of HB, October/2019; (b) Sustainable Development Goals; (c) HB logo; (d) first activity at HB, in October/2019.

Photographic record 1



Source: Program collection, 2019.

Based on the images above, the EA project began, initially involving a small part of the Geography course and some scholarship holders and volunteers. Also in 2019, we were able to articulate a partnership with several schools to bring the ideas worked on in the HBCB spaces to them.

Planting, management of unused spaces, creative economy, environmental awareness of the students, were some of the initial goals worked on during this period. Unfortunately, in 2020 and until mid-2021, there was an interruption of extension activities at the university. Because of the implementation of social distancing, practical activities were suspended and the greatest concentration was on the theoretical aspect.

In 2021, we resumed practical activities, mainly receiving schools as visitors, as well as visiting some of these schools. In addition to maintaining the HBCB spaces, each project articulates and enables its demands. In photographic record 2, we have (a) Visit of the students of the Nossa Senhora



de Lourdes School in the city of Guarabira; (b) Planting of crab seedlings (*Spondias purpurea*), with the HBCB/CH/UEPB team, in 2022; (c) Record of the activities developed as a result of the 1st Humaniza Bosque Extension Seminar, in 2022; (d) Visit to the E.M.E.F Walfredo Cantalice da Trindade school - Sítio Serra da Jurema Pirpirituba-PB, for the recycling and planting workshop of one of the plant species donated for the afforestation of the school environment, in 2022.

Photographic record 2

a)



b)



c)



d)



Source: Programme collection, 2021/2022.

In 2022 and 2023, the activities intensified and the number of project members increased, which made the activities more and more dynamic. In photographic record 3, we have some more of the activities developed. Images: (a) literary soirée of the Free Books Project, 2022; (b) exchange of books from the Free Books Project at Pracinha Prof. Carlos Belarmino; (c) EA action at ECI Francisco Pessoa de Brito, Araçagi/PN; (d) work awarded at the VIII Extension Seminar – first place in the environment category, Edylma Thais da Silva Floriano, scholarship holder of the 2022/2023 quota; (e) inauguration of the **HBCB Cinema**, during the celebrations of the 4th anniversary of the foundation of the forest; (f) part of the team and family of Professor Carlos Belarmino attending the celebrations of the 4th anniversary of the HBCB.



Photographic record 3

a)



b)



c)



d)



e)



e)



Source: Program collection, 2022,2023.

In the images above, we have some of the activities developed, leading the student to participate and act with social/environmental practices, socializing knowledge and bringing the local community closer to the knowledge and practices developed in the academy.

Currently, the HBCB Program has 7 projects with scholarships and each of them, with at least 8 volunteers, added to the number of teachers and external participants, we have more than 50 people working in the aforementioned program. Chart 1 shows the diversity of relevant topics addressed from an environmental perspective, directing the participants to see these practices that are beneficial to the natural environment as a future possibility for education.





TABLE 1: List of Projects Linked to the HBCB/CH/UEPB Program

| No. | PROJECT TITLE                                                                                                                                                                                                                    |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | BIOGEOGRAPHY AND ORCHID GARDEN OF HUMANIZA BOSQUE CARLOS BELARMINO (HBCB), OF THE HUMANITIES CENTER OF THE STATE UNIVERSITY OF PARAÍBA: Nature and Culture in Species Selection                                                  |
| 2   | LITERARY READING, ENVIRONMENTAL PRACTICES AND THE SYMBOLIC/CULTURAL CONNECTIONS CREATED FROM THE HUMANIZA BOSQUE CARLOS BELARMINO (HBCB), FROM THE HUMANITIES CENTER OF THE STATE UNIVERSITY OF PARAÍBA                          |
| 3   | FREE BOOKS: THE PRACTICE OF READING IN THE SPACES OF HUMANIZA BOSQUE CARLOS BELARMINO (HBCB) CAMPUS III OF UEPB                                                                                                                  |
| 4   | APPLICATION AND SOCIALIZATION OF THE METHODOLOGY OF CREATIVE ECONOMY AND CLEANER PRODUCTION IN THE INFRASTRUCTURE OF HUMANIZA BOSQUE CARLOS BELARMINO (HBCB), OF THE HUMANITIES CENTER OF THE STATE UNIVERSITY OF PARAÍBA - UEPB |
| 5   | ENVIRONMENTAL PRACTICES BASED ON THE SUSTAINABLE DEVELOPMENT GOALS (SDGS) IN PUBLIC SCHOOLS AND COMMUNITIES IN THE STATE OF PARAÍBA                                                                                              |
| 6   | SOCIALIZATION OF ENVIRONMENTAL PRACTICES FROM HUMANIZA BOSQUE CARLOS BELARMINO (HBCB), FROM THE HUMANITIES CENTER OF THE STATE UNIVERSITY OF PARAÍBA - UEPB                                                                      |
| 7   | SPACE FOR EXPERIENCES IN TEACHER TRAINING AT HUMANIZA BOSQUE CARLOS BELARMINO (HBCB) OF THE HUMANITIES CENTER OF UEPB                                                                                                            |

Chart 1 reveals the multiple possibilities of addressing environmental issues within Geography. It is important to remember that the scope of geographic analysis crosses its own borders and dialogues with several other human and social sciences. Established knowledge needs to create connections and involvement of learners with the environment in which they live. The HBCB program aims to discuss and teach through a multiplicity of perspectives, the importance of interdisciplinarity and transversality in the contents that students work on inside and outside the classroom.

## 5 FINAL THOUGHTS

The Humaniza Bosque Carlos Belarmino (HBCB) program made it possible for those involved to know and experience the use of different learning resources and techniques, making the teaching-learning relationship more pleasurable, working beyond the contents, human values, interspersing experiences and practices that dynamize a more humane look at environmental issues.

It is understood that the public university has the duty to encompass within its walls, the entire community that is around it. This is only possible if there is an articulation of activities that allows the interweaving of knowledge constituted by science and common sense. This dynamic is only possible through trans and interdisciplinarity. This activity allows the understanding that theory and practice, when well worked, make learning interesting and relevant.



The Brazilian model of education has flaws and deficiencies that discourage the development of quality education. Seeking to minimize the fractures generated by precariousness in teaching, especially in the public sphere, teachers adopt techniques that facilitate learning and internalization of content.

The practices developed by HBCB, in these 4 years of activity, allowed a strengthening of relations between the academy and the community, bringing a perception of the lived space and its dimensions. The activities seek to discuss and question environmental practices that allow for the articulation of a more humane world, with a more careful look at the environment and its multiple interactions. "We live in a time of deep evaluation of our modern-capitalist myth, which praises the new all the time, sometimes forgetting to discuss our links with (good) preservation" (Haesbaert, 2017, p.37).

Regarding environmental issues, it is necessary to create processes and alternatives that minimize the impacts of this bad relationship that human groups maintain with the environment. One way to enhance this dissemination of sustainable knowledge and practices is to adopt strategies that involve the educational niche. This partnership works as a vehicle for the propagation of more balanced environmental teachings and practices.

The links between society and nature need to be re-established. Only through an environmental dialogue based on education will we be able to lay the foundations of understanding for the propagation and strengthening of the environment. The involvement of the community in sustainability practices in relation to the natural environment has strengthened ties and boosted possibilities for the expansion of sustainable practices.

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