


"SER MATA ATLÂNTICA" PROGRAM: CHALLENGES AND POSSIBILITIES FOR THE DEVELOPMENT OF ENVIRONMENTAL PRACTICES IN THE MUNICIPALITY OF VARGEM ALTA, STATE OF ESPÍRITO SANTO, BRAZIL

 <https://doi.org/10.56238/sevened2024.032-013>

Michele Sampaio¹, Helimar Rabello², Aline Lobato³ and Valdivia Rocha⁴

ABSTRACT

The "Ser Mata Atlântica" Program, implemented in Vargem Alta, is an environmental education project focused on valuing the local ecosystem and training educators. The main objective of the program is to promote environmental awareness among students and teachers, encouraging sustainable practices and the understanding of ecological and cultural interdependencies. Based on *Ecological Literacy* concepts by David Orr (1992) and on a *place-based learning approach*. The program aims to create a sense of belonging and responsibility towards the environment among participants. To structure the methodology, the analysis was constructed from the perspective of Content Analysis, as proposed by Bardin (1977) and in the use of thematic categorization according to Franco (2008). As a result, the program has strengthened local environmental education, with teachers and students demonstrating a high level of engagement and awareness. The introduction of practical activities, such as outdoor classes and the use of natural resources as an object of study, promoted meaningful and contextualized learning. The participants' responses highlighted their enthusiasm and involvement with the content, showing that the program met their objectives of developing a critical and reflective ecological awareness. The "Being Atlantic Forest" Program represents a successful experience in environmental education. Its approach, centered on the community and the local environment, proved to be a replicable methodology for other localities that aim to promote sustainability and care for the local environment in their daily educational practices.

Keywords: Environmental Education. Vargem-Altenses ecosystems. Teacher Training.

¹ Pedagogue and Teacher, Master in Teaching, Basic Education and Teacher Training, Doctorate student in Political Sociology, Vargem Alta City Hall

² Biologist, specialist in Environmental Management and Agroecology, Master in Sanitary and Environmental Engineering, Municipal Secretary of the Environment/Municipality of Vargem Alta.

³ Biologist specialized in Environmental Management and Education, Doctorate student in Sustainability, Águia Branca Environmental Reserve

⁴ Environmental Manager, Specialist in Third Sector Administration, Stabbed Tanager Conservation Program.



INTRODUCTION

This article aims to report the successful experience of the municipality of Vargem Alta, state of Espírito Santo, Brazil, with the "Ser Mata Atlântica" Program, which is an environmental education initiative focused on promoting knowledge and preservation of ecosystems, considering their geography, history and local culture. Based on an interdisciplinary and community proposal, the program was based on the continuing education of educators, the creation of a discipline focused on the study of local ecosystems and practical actions in schools and communities.

Teacher training, in general, must incorporate a perspective of Environmental Education that is continuous and connected to the history and reality of the territories, enabling educators to promote critical and meaningful learning with students. This approach allows teachers to reflect on how these spaces have been occupied and degraded, developing pedagogical strategies that encourage the understanding, defense and preservation of the local environment. Thus, they will be better prepared to contribute to the Sustainable Development Goals (SDGs), especially with regard to Quality Education (SDG 4), Sustainable Cities and Communities (SDG 11), Climate Action (SDG 13) and Life on Land (SDG 15), fostering educational practices aimed at active and environmentally conscious citizenship.

The need to carry out an educational work focused on Environmental Education, in a continuous way and connected with local history, reflecting on the way this territory was occupied, divided and degraded. This can contribute significantly to the construction of meanings in the context of students' learning in order to think about this territory from an environmental perspective, in a process that aims to learn-defend-preserve.

Based on these premises, understanding that Environmental Education can provide opportunities for the construction of knowledge, skills, social values, care for life, society and nature, in order to enhance integral human development, promoting socio-environmental justice and equity, this article aims to present a project developed in the municipality of Vargem Alta, which started from the creation of a continuous program, which was based on the following pillars:

1. Continuing education of environmental educators;
2. Creation of a discipline focused on the study of regional and local ecosystems in municipal public education schools;
3. Actions and projects in municipal schools and communities in the municipality of Vargem Alta.



THEORETICAL FRAMEWORK

A MEETING, A CHALLENGE AND A TRANSFORMATIVE ACTION: THE SER "MATA ATLÂNTICA" PROGRAM IS BORN

The embryo of the Ser Mata Atlântica Program was born from a meeting between the Municipality of Vargem Alta, in which the Municipal Mayor, as well as his secretaries of Education and Environment, were present, and the Águia Branca Environmental Reserve, which is a Private Natural Heritage Reserve that has more than 2,200 hectares of preserved Atlantic Forest and that it is also home to rare, endemic and endangered species, such as the stabbed tanager (*Nemosia toureio*), the uruçú-capixaba bee (*Melipona capixaba*), the juçara palm (*Euterpe edulis*) and the phylum within Espírito Santo (*Philodendron spiritus sancti*) among others, through its environmental managers.

At the time, among other agendas, the managers of the Environmental Reserve brought the need for an environmental education program for the municipality that involved the Environmental Reserve itself, schools and surrounding communities, making themselves available to contribute to this intonation. Much was also said about the need to know the territory and all the natural riches of the municipality, thus allowing full access to its preserved areas for this educational management. In addition, the need to build a correct understanding of the current environmental problem was stressed.

At this time, it was seen that an environmental education program could be articulated between the institutions so that the proposed objective could be achieved. However, between dialogues, reflections and ideas, an important challenge was launched by the mayor to all those present at the meeting: "*What if, in addition to actions in school institutions and communities, we created a discipline in municipal schools so that students get to know Vargem Alta?*". Thus, the provocation of the municipal manager gave rise to the idea that came to be known as the "Ser Mata Atlântica Program".

Starting from a global view, Morin (2000) argues that knowledge should be treated in an integral and critical way, recognizing the interdependence between natural and social systems. This vision proposes an education that transcends the fragmentation of knowledge, aiming to prepare citizens who are more aware of ecological interactions and capable of facing environmental challenges with a systemic and ethical perspective.

With this, a discipline was thought of that could form citizens who knew the history, geography, culture and biodiversity of the Atlantic Forest that occurs in the municipality, thus generating a sense of belonging and appreciation of this territory, recognized as the "City of Green and Water".



From there, a Working Group (WG) was created and added to it was the inclusion of the Stabbed Tanager Conservation Program (PCSA) carried out by the Marcos Daniel Institute (IMD). The PCSA has its actions based on the National Action Plan for Birds of the Atlantic Forest of ICMBio; establishes its actions based on the National Action Plan for Birds of the Atlantic Forest of ICMBio, promoting the conservation of several endangered species and, primarily, the species *Nemosia rourei*, a bird endemic to mountainous regions of Espírito Santo and currently considered critically endangered. In addition to field research activities, the PCSA also includes awareness-raising actions, environmental education and community engagement in conservation practices.

The WG began to think and elaborate the construction of a proposal for a syllabus for the challenge of creating a discipline and, from it, a proposal for Continuing Education of Environmental Educators, with a view to providing opportunities for continuing education focused on the theme that generated the discipline, which were constituted by the Vargem-Altenses ecosystems, culture, history and local geography. With this, the "Ser Mata Atlântica" Program was born,⁵ implemented in the municipal school network of Vargem Alta.

THE THEORIZATION OF A PROGRAM FOR THE CONSERVATION OF LOCAL ECOSYSTEMS

Orr (1992) in his work *Ecological Literacy: Education and the Transition to a Postmodern World*, understands education as a process of raising awareness about sustainability, community engagement and building a deep ecological understanding. For the author, education is not neutral in relation to the environment, so that the pedagogical choices we make — what we teach and what we fail to teach — are capable of shaping students' perception of their relationship with nature, promoting or neglecting ecological awareness.

With this theoretical inspiration, the WG advanced in its studies and meetings, resulting in the launch of the program, held on August 2, 2022. On the occasion, the inaugural class of the first class of Training of Environmental Educators of Vargem Alta was also given, marking the beginning of this initiative dedicated to strengthening local environmental education.

Orr (1992) understands that "all education is environmental education" since it has the ability to shape the relationship of students with the environment, whether the nature of

⁵ Being Atlantic Forest comes from the concept that we are all connected, we are one with the nature that surrounds us, with the Atlantic Forest, one of the most threatened biomes in the world and also our home. We live in the Atlantic Forest, we are Atlantic Forest. And we are at the right time to rescue our essence, to learn to be, to do and to dream together.



the classes is included or excluded. The author also defends *Ecological Literacy*, that is, ecological literacy that happens through experiences and practices, such as classes in direct contact with the local ecosystem, exactly what the "Ser Mata Atlântica" Program proposed, considering the potential to encourage participatory learning that provides students with the opportunity to develop a practical understanding of the environment, which, By itself, it is very enriching.

The "Ser Mata Atlântica" Program was structured based on the following objectives:

1. To foster the appreciation of the natural, geographical and historical-cultural heritage of Vargem-Altense;
2. Strengthen the socio-environmental theme in the school context;
3. Work on the interdisciplinarity and transdisciplinarity of environmental education;
4. To stimulate the protagonism of the school community regarding local environmental challenges.

Orr (1992) points out that the study of ecology and local history represent essential tools for an environmental education in which it will be possible to prepare students for the ecological and social challenges of the world. For him, understanding and valuing the specific context of a place – its ecosystems, history, and culture – is essential for students to develop an authentic relationship with the environment and a commitment to its preservation.

In this sense, the author argues that environmental education should encourage students to see nature and the history of the place in which they live, not as distant objects, but as intrinsic parts of their lives. As students explore their local ecosystems, they acquire a critical and informed view of society-nature interactions. Thus, in this process it is possible for them to see the impact of human actions, the importance of conservation.

The author argues that the study of local ecology and history generates a sense of belonging that goes beyond academic learning, it is a sense of belonging that inspires care for the environment, developing an ethic of responsibility and respect for nature, as well as for the history of their community. By knowing that, for example, certain historical practices have contributed to the degradation or preservation of their ecosystem, students can reflect on their own role in the continuity of this history. Therefore, instead of distant and abstract teachings, it becomes possible to promote teachings rooted in the students' reality.



THE *PLACE-BASED LEARNING APPROACH* AND THE *ECOLOGICAL LITERACY PERSPECTIVE*

The "Being Atlantic Forest" Program has the format of the *place-based learning* approach - place-centered learning - presented by Orr (1992). For the author, the playful activities carried out in the environment constitute an engaging and concrete practice that not only instructs, but also emotionally connects students to their surroundings and enables the strengthening of the sense of local belonging and encourages environmental responsibility. Thus, this approach creates opportunities for students to be actively involved and develop a genuine interest in preserving and understanding the natural environment.

Place-based learning is an educational approach that seeks to connect academic learning with the geographical, cultural, and ecological context of students, using the local environment as a "classroom". This method values the active involvement of students with their surroundings, promoting a deeper understanding of the contents and encouraging a bond with the community and the local environment (ORR, 1992). Through this practice, it is possible to promote what Orr (1992) calls *Ecological Literacy*, which is a sense of belonging and responsibility in relation to the local environment.

Ecological Literacy, in turn, emphasizes the importance of training environmental educators by advocating for an education that develops an understanding of ecological systems and the interdependence between humans and nature. For the author, environmental education needs to transmit information; It must cultivate an ecological sensitivity that enables educators to understand and relate to the natural world in a deep and responsible way.

ARTICULATION OF THE "SER MATA ATLÂNTICA" PROGRAM WITH THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

The "Being Atlantic Forest" Program stands out as a successful experience in environmental education for several factors. Firstly, because its community approach is directed towards local ecosystems, it fosters a meaningful connection between participants and the environment in which they live, awakening a sense of belonging and responsibility.

This type of educational action, based on knowledge of the territory and the appreciation of local biodiversity, facilitates practical learning and direct understanding of the impacts of human actions on the ecosystem, aligning with the Sustainable Development Goals (SDGs), such as Quality Education (SDG 4), Sustainable Cities and Communities (SDG 11) and Life on Land (SDG 15).



METHODOLOGY

This article was initially designed to present a successful experience of the municipality of Vargem Alta in relation to the "Being Atlantic Forest" Program. Thus, to structure the methodology of the work, the thematic categorization of Franco (2008) and content analysis proposed by Bardin (1977) were taken as a reference. From it, it was possible to organize and interpret the answers of the participants, as well as qualitative data collected during the years of implementation of the program, which allowed a better understanding of the central aspects of the perceptions and experiences of the participants involved.

The data used for this report were extracted from the participants' answers, descriptions of activities and institutional documents related to the "Ser Mata Atlântica" Program. The participants' responses were collected from *Google Forms questionnaires applied between 2022 and 2024 and also from works produced by the participants in this period, in which they describe their perceptions and learning from the experience of participating in the training program.*

Following the approach of Franco (2008), a thematic categorization was applied to deepen the analysis of the data, dividing the answers into specific subthemes that could reflect the particularities of the program. Through this thematic categorization, it was possible to carry out a more detailed analysis of the contents, facilitating the interpretation of the perceptions of the students about the application of environmental practices in their choices and the connection with the local ecosystem.

The content analysis carried out through the approaches of Bardin (1977), allowed the identification and categorization of the recurring themes in the answers of the students, as well as in the analysis of the work carried out, as in the case of the construction of didactic sequences as proposals of practice to be carried out by the students in the schools in which they work. From the initial reading of the contents, central categories were identified that reflect the main dimensions of the students' experience, such as: "practical and playful learning", "integration with the local environment" and "environmental engagement and awareness". Thus, it was possible to organize the information in a systematic and coherent way, creating a framework for the analysis of experience.



ANALYSIS OF THE RESULTS

THE METHODOLOGICAL STRUCTURE OF THE "SER MATA ATLÂNTICA" PROGRAM IN CONTRAST TO THE LACK OF HUMAN AND FINANCIAL RESOURCES

In order to carry out the actions planned by the "Ser Mata Atlântica" Program, it was necessary to organize an action plan method, considering the importance and dimension of the project, the WG organized moments to be overcome as the objectives proposed for each phase were achieved, as follows:

Table 1 – Organization of the Actions of the "Ser Mata Atlântica" Program

Planning of the actions carried out by the WG	
1st moment:	planning meetings and construction of a syllabus proposal for the discipline entitled "Vargem-altenses Ecosystems";
2nd moment:	planning of a continuing education of educators based on the topics of the syllabus;
3rd moment:	carrying out the continuing education of educators;
4th moment:	Insertion of the discipline in the diversified part of the school curriculum of the first full-time school in the municipality of Vargem Alta;
5th moment:	Encouragement in carrying out interdisciplinary and transdisciplinary projects in regular schools with the theme of local ecosystems.

Source: Authors' collection, 2024.

The actions to integrate the premises of the "Ser Mata Atlântica" Program are articulated with Orr's theory (1992), as they emphasized an educational approach that values place-based learning – as we will see later, and the central role of the educator in environmental awareness, as well as in the formation of an ecologically responsible community. In the author's view, environmental education should be contextualized and practical, aiming to connect students to the local ecosystem to promote meaningful and lasting learning.

In this way, by building a menu for the discipline "Vargem-altenses Ecosystems", the initiative promoted this direct connection of students with biodiversity and local ecological history, encouraging a sense of belonging and environmental responsibility, as defended by the author. Knowledge of the local environment is essential for students to develop an ethic of care and appreciation of the environment, something essential for conservation.

In the same sense, the continuing education of environmental educators added to the creation of a specific discipline with themes of local ecosystems helped to equip teachers with the tools and knowledge necessary for the development of interdisciplinary projects. Projects that may be able to promote learning in an integrated and relational way, a practice



also highlighted by the author as essential to understand environmental impacts and develop a holistic view of the interactions between human beings and nature.

The target audience of the program was constituted, in the first year of training, for teachers of history, geography, science and pedagogues of the municipal school network of Vargem Alta, designed to teach and monitor the implementation of the discipline in schools, and also some professionals from the technical team of the municipal department of Education. In addition, the technical team of the municipal department of the Environment was incorporated into the scope of the program, considering the participation of its manager in the program's WG, in order to reinforce the need to train its technical staff to improve municipal environmental management, as well as to promote articulated actions between the departments of education and the environment.

The "Ser Mata Atlântica" Program, despite the absence of a specific financial budget, had its beginning made possible by the effort and commitment of the partner institutions, which dedicated their own resources and efforts to the development of the planned activities. Each institution contributed according to its capacities, taking on tasks and demands of the program without depending on external funding. This collaboration between the City Hall, the Águia Branca Environmental Reserve and the PCSA was essential to make the first phases of the program viable. Collective action and the creative use of internal resources allowed the launch and continuity of the project, demonstrating the positive impact of cooperation and community mobilization in the promotion of local environmental education.

FORMATIVE PERSPECTIVES AND PRACTICAL POSSIBILITIES OF THE STUDENTS OF THE "SER MATA ATLÂNTICA PROGRAM"

During the development of the program, when the second class was trained, the students were given the opportunity to participate in a practical activity in the area that comprised the Águia Branca Environmental Reserve, within the municipality of Vargem Alta. After the activity, the participants were invited to answer a provocative question from the trainers: *As educators, we know that playful and practical activities enhance the learning of our students. Based on this premise, we need to know how your experience was in today's activity. Tell us?* The answers presented in Table 2 indicate the perception of each student in relation to the experience lived.



Table 2 – Responses of the second group of students when participating in playful and practical activities in the area of the Águia Branca Environmental Reserve

<i>Student 1</i>	A wonderful experience. The activity provided practical, fun and collective learning, enabling several different practices to be worked with the students.
<i>Student 2</i>	The activity was excellent and a lot of fun!!! It aroused curiosity and interest in the subject and also provided interactivity among the students. I loved it!!
<i>Course 3</i>	Today we had an incredible experience, an outdoor class with dynamics integrated with nature, where we simulated in practice, how to insert Environmental Education in schools. We saw instruments that can be used in class, such as introducing and making students interested in the subject, showing it in practice and teaching in a practical and harmonious way, making there be interest and that everyone gets together and interacts to carry out activities in groups. We know the red lichen and also the old man's beard. These fungi, necessarily red or pink lichens, are indicators of clean air.
<i>Course 4</i>	It was wonderful. Experiencing theory and practice in such a dynamic and fun way highlights new possibilities for approaching the contents. Everything that is tangible creates memories more effectively and provides the possibility of association with the student's everyday situations. This class made it clear that it is necessary to stop and observe what is around us.
<i>Course 5</i>	The experience was great! The field class allowed to expand knowledge and information about the Atlantic Forest forest, located in the Águia Branca reserve. Through group dynamics, it was possible to learn how to use a step marker, a compass, a map and various other information about and during the route. In the class, it was possible to experience very important reflective practices to teach classes with children, which is to hear, see and feel in practice the nature around us!
<i>Course 6</i>	We have participated in wonderful moments in this training. Our third class of the SER Mata Atlântica Environmental Education Training, in the Águia Branca Reserve, "Basic Concepts of Ecology and Environment", was no different. It exceeded my expectations from the welcome, the dynamics, to the passing on of the contents of the meeting. I recognize the great capacity of our trainers. But they have presented us with the contents with lightness and simplicity, allowing each participant to feel free to ask, answering questions, facilitating the dynamics of training and the significant construction of new knowledge. This teaching strategy makes us return to our classrooms even more enthusiastic to pass on all our learning, because we experience in these meetings curiosities that enhance our pedagogical practice, awakening us to reflect on the need to better explore the diversity of resources that nature itself offers us. Another situation experienced in this training that has been of great relevance is the interaction between the participants. We socialize knowledge that promotes the growth of the whole group, which makes our meetings productive and, above all, a very pleasant environment.
<i>Course 7</i>	The Ser Mata Atlântica course brings pedagogical practices of total recognition. On course days, we have activities focused on the theme and without studying papers as usually happens with other courses. We have the opportunity to get to know our biome even more and build new knowledge.

Source: Authors' collection, 2024.

The answers of the students were analyzed and several similarities were found that highlighted fundamental aspects of the learning experience lived in the formation of the program, such as:

1. **Practical and dynamic learning:** Many students emphasized the value of practical learning and how it enabled new forms of teaching for application with their students. Student 1, for example, mentions "practical, fun and collective learning", while Student 4 comments on the importance of experiencing theory and practice in a dynamic way, which "creates memories more effectively".



2. **Interactivity and integration with nature:** Integration with nature and the local environment is an aspect highlighted by several students. Student 3 describes an "outdoor class with dynamics integrated with nature" and emphasizes the discovery of local species as indicators of environmental quality. Student 5, on the other hand, values the "field class" for allowing direct contact with the biodiversity of the Atlantic Forest, favoring reflective learning.
3. **Enthusiasm and engagement:** The answers also reflect the enthusiasm and engagement of the participants. Student 2 describes the experience as "excellent and a lot of fun", and Student 6 comments on the return to the classroom with "enthusiasm" to share what was learned.
4. **Socialization and collective construction of knowledge:** The importance of the exchange of knowledge among participants is highlighted by Student 6, who talks about the "interaction between participants" and the "growth of the whole group". Student 7 also values the opportunity to "build new knowledge" in a practical and contextualized way.

It is noted that the answers of the students reveal an educational experience that was indeed transformative, in which direct contact with the environment, practical teaching and collaborative work strengthened the training of educators and increased awareness about the importance of environmental preservation. These aspects are aligned with the proposals of an ecological education based on place, promoting meaningful teaching that is applicable to the real context.

In the answers, it can be seen that the students valued direct contact with nature and outdoor activities, mentioning the value of learning "on the spot", as in the case of Course 3, which describes the study of lichens and other species as indicators of fresh air. This hands-on learning has the potential to strengthen educators' "ecological literacy" by enabling them not only to understand the ecosystems in which they are embedded, but also to recognize the importance of protecting them.

It is possible to identify that the Sustainable Development Goals (SDGs) are also present in the answers presented by the participants. The testimonies that highlight **practical learning and interactivity** are aligned with SDG 4, which promotes, in turn, inclusive and quality education. The participants emphasized the positive impact of practical and outdoor activities, as described by Student 4, who mentioned the lasting effect of experiencing theory in a concrete way. These educational practices reflect with absolute certainty a contextualized and engaging teaching, promoting an education that goes beyond the traditional classroom.



The connection between educators and the local ecosystem was mentioned by several students, such as Student 5, who valued the "field class" and direct contact with local biodiversity. This experience not only promoted knowledge of the natural environment but also strengthened the community's commitment to sustainability. This is in line with SDG 11, which encourages the creation of more sustainable and resilient communities, with citizens who understand and value their territory.

Also, the testimonies that mentioned the importance of environmental awareness, such as that of Course 3, who mentioned the planting and preservation of trees, dialogue directly with SDG 13. This objective seeks to strengthen education and awareness of climate change, and the program's activities encouraged practices that reduce environmental impact and promote a more harmonious relationship with nature.

Finally, the appreciation of local biodiversity and awareness of the importance of native species, such as lichen and "old man's beard" mentioned by Student 3, are aligned with SDG 15. These SDGs are centered on the conservation and sustainable use of terrestrial ecosystems. The reports of the students reflected the learning about the importance of protecting local biodiversity and used ecosystems as a pedagogical resource, promoting an ethic of care for nature.

One of the activities carried out by the students of the class of 2023 intended to put into practice the knowledge acquired in the course of training. Thus, they organized themselves into groups to elaborate a series of didactic sequences and, when questioned about the objectives, presented the statements highlighted in Table 3:

Table 3 – Objectives of the Didactic sequences produced by the students of the "Ser Mata Atlântica" Program

<i>Student 1</i>	During the II Training Course for Environmental Educators, the project was idealized in actions that were implemented in the rural schools mentioned in the SD, resulting in the DS presented as the final activity of the training.
<i>Student 2</i>	Remembering that the materials used to make the nests must be organic so as not to interfere with the reproduction cycle of the species.
<i>Course 3</i>	The Project was developed in order to raise children's awareness about the continuity of the work related to planting trees and their preservation, the observance and benefits of the production of healthy fruits, as well as the increase of pollinating agents.
<i>Course 4</i>	During the II training course for environmental educators, the project was idealized in actions that were implemented in the rural schools mentioned, resulting in the one that was improved to be presented as the final activity of the training.
<i>Course 5</i>	During classes, they will have rehearsals for the presentation of the song. This sequence is just the introduction on the theme of water and that from this work, many other activities will be proposed raising awareness and further sharpening interest in the theme and the importance of water for living beings.

Source: Authors' collection, 2024.



Some similarities can be identified in the answers presented by the students, which reflect an alignment between the objectives of the students in relation to environmental preservation and the practice of environmental education through concrete and sensitizing activities, which is in accordance with the guidelines of the training received.

Students 1 and 4 present similar excerpts when they mention that, during the training course, the project was conceived and implemented in actions in rural schools, resulting in the creation and improvement of a final product presented in the training. The phrases "during the II Training Course for Environmental Educators, the project was conceived in actions that were implemented in rural schools" appear almost identical in the answers of both, indicating a convergence in the description of the practical implementation of the knowledge acquired.

Student 3 and Student 5 touch on the idea that the activities developed should lead to environmental awareness. Student 3 mentions the importance of "obtaining children's awareness about the continuity of the work related to planting trees and their preservation," while Student 5 mentions introductory activities on the theme of water, sensitizing students about its importance for living beings. Both answers emphasize the role of environmental education in making students aware of attitudes of preservation and ecological awareness.

The answer of Student 2 highlights that the materials used to make nests must be organic, so as not to interfere with the natural cycle of the species. Although this point is specific, it can also be linked to the idea of sustainable practices implicitly mentioned in the awareness actions of other students.

The didactic sequences developed were organized according to different educational levels and contexts, aiming to meet the specificities of each audience and facilitate the implementation of the contents in each area:

- Rural Education: Two specific sequences were produced for the context of Rural Education, valuing the rural environment and sustainable practices related to the place where students live and study. These activities are oriented to the agricultural reality and environmental conservation that permeates the lives of rural students.
- Early Childhood Education: Two other sequences were created for Early Childhood Education, focusing on playful and sensory activities that introduced the children's universe to the ideas of preservation and recognition of the surrounding natural elements. At this stage, the contents should be adapted to be more concrete, arousing curiosity and connection with nature.



- Elementary School – Early Grades: A sequence was prepared for the initial grades of Elementary School, integrating practical activities that introduce environmental issues in an accessible way, promoting awareness from an early age about the importance of caring for the environment.
- Elementary School – Final Grades: Finally, a sequence was developed for the final grades of Elementary School, where students are encouraged to explore more complex topics and to critically reflect on human actions in the environment. The activities in this sequence include greater theoretical depth and promote student engagement in projects and discussions about sustainability.

The analysis of the participants' answers revealed a convergence around fundamental principles of environmental education, aligned with the training promoted by the "Ser Mata Atlântica" Program for environmental educators. The similarities in the descriptions of implementation and awareness show that the students internalized the importance of concrete and practical activities to promote environmental preservation among the students. In addition, the didactic sequences were developed with a focus on the specificities of each educational context, ranging from Early Childhood Education to Elementary School, initial and final grades, and Rural Education. This diversity of approaches allowed each school level to explore the environment in a meaningful and contextualized way, respecting the stage of development and the reality of the students. As a result, the program stimulated not only learning, but also the formation of a critical and ecological awareness, involving students in environmental preservation practices appropriate to their realities.

CONSIDERATIONS

The experience of the "Being Atlantic Forest" Program in Vargem Alta demonstrates the strength and transformative possibility that environmental education can generate in local communities. This project not only fostered a greater connection between educators and local ecosystems, but also cultivated in the participants — students and teachers — a sense of belonging and responsibility towards the natural environment. The success of the program shows that, with commitment and strategic partnerships, it is possible to overcome financial limitations and mobilize local resources to create meaningful and practical environmental education.

The continued training of educators, the creation of a specific discipline on local ecosystems and the implementation of interdisciplinary activities have increased ecological awareness in the school community and fostered a culture of preservation. The program's



approach, centered on the community and the specificities of the local environment, proved to be highly replicable and can serve as a model for other localities that wish to promote sustainability and care for the environment in their daily educational practices.

The "Being Atlantic Forest" Program leaves a legacy that goes beyond theoretical learning, as it inspires conservation practices that contribute to the well-being of the community and the appreciation of natural resources. The environmental education promoted by the program offered a perspective of lasting change, forming citizens who are aware and prepared for ecological challenges, who understand the importance of biodiversity and the responsibility to protect the planet.



REFERENCES

1. Bardin, L. (1977). ****Análise de conteúdo****. Lisboa: Edições 70.
2. Franco, M. L. P. B. (2008). ****Análise de conteúdo****. Brasília: Liber Livro Editora.
3. Orr, D. W. (1992). ****Ecological literacy: Education and the transition to a postmodern world****. Albany: State University of New York Press.
4. Morin, E. (2000). ****Os sete saberes necessários à educação do futuro****. São Paulo: Cortez.
5. United Nations. (2015). ****Transforming our world: The 2030 agenda for sustainable development****. Disponível em: https://sustainabledevelopment.un.org/post2015/transformingourworld(https://sustainabledevelopment.un.org/post2015/transformingourworld). Acesso em: 7 nov. 2024.