



Perception about the environment of 8th grade students in the city of Tamandaré (Brazil)

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Article History: Submitted and accepted in the VI National Congress of Education and indicated for publication.

ABSTRACT

This work reports on a pedagogical action carried out in an elementary school class II, final years. More precisely, an 8th-grade class. The focus of this action was to carry out an environmental education activity and to propose to the students to think about solutions that enable the preservation and care of the environment. Through this it was through the Bardin method (2011), that I analyzed the content raising as solutions to environmental problems. The research was characterized as qualitative, based on Godoy (1995). Also, part of the scientific basis of this article, the law no. 12,305/10, on the National Policy on Solid Waste, the National Curricular Parameters, PCN's, the documents relating to Agenda 21 and the Law of Guidelines and Bases of Education, the LDB. These documents served to clarify the importance of pedagogical work with students in the school community and how to develop proposals that aim to solidify the environmental awareness of each one.

Keywords: Environmental Education, Sustainability, Environment, Practices, Awareness

Uma ideia consciente: a preocupação aparente dos educandos do 8º ano do ensino fundamental, em relação ao meio ambiente na cidade de Tamandaré (Pernambuco)

RESUMO

O presente trabalho relata uma ação pedagógica realizada numa turma de ensino fundamental II, anos finais. Mais precisamente, uma turma de 8º ano. O enfoque dessa ação foi realizar uma atividade de educação ambiental e propor aos estudantes pensar em soluções que viabiliza a preservação e cuidado com o meio ambiente. Mediante a isto foi através do método de Bardin (2011), que analisei o conteúdo levantando como resoluções aos problemas ambientais. A pesquisa se caracterizou como qualitativa, baseando-se em Godoy (1995). Também fazem parte do embasamento científico deste artigo, a lei nº 12.305/10, sobre a Política Nacional dos Resíduos Sólidos, os Parâmetros Curriculares Nacionais, PCN'S, os documentos referentes à Agenda 21 e a Lei de Diretrizes e bases da Educação, a LDB. Tais documentos serviram para elucidar a importância do trabalho pedagógico com os estudantes na comunidade escolar e como desenvolver propostas que visem solidificar a consciência ambiental de cada um.

Palavras-Chaves: Educação Ambiental, Sustentabilidade, Meio Ambiente, Práticas, Conscientização.

Lira, M.S., Cardoso, L.A.R. (2020). Perception about the environment of 8th grade students in the city of Tamandaré (Brazil). **Environmental Education (Brazil)**, v.1, n.1, p.21-27.



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1. Introduction

The concern with the environment is apparent in all segments of society and results in the search for physical and social mechanisms that slow down environmental degradation advances. Nowadays, consuming the most varied products has become a very routine habit in our lives and the restlessness about these products' disposal. Therefore, it believes today that the difficulty of building environmental awareness, part of this premise of the act of consuming exaggeratedly, for the work of preservation and care with the environment, is not only to stop consuming something but the care with the use and its disposal at the end of the utility process. Thus, we focus on our discussion of the school's role in the student's formation about garbage disposal and his memories of this action.

In the educational actions, we build the knowledge of how to live together in society, keeping in mind that the school space's interaction is the first moment after the family, which the child has contact with the outside.

The focus of pedagogical practice on the students' knowledge about environmental care and this action also aimed to raise questions about the sustainability that they, as part of the local community, develop. This activity was carried out in 2016 as part of the workload of the Environmental Education discipline, linked to the extension project *Ciranda Dos Saberes* of the Geography Degree course at the Federal University of Pernambuco. The developed the project at the Almirante Tamandaré Municipal School, located in Tamandaré, Pernambuco. The city is inserted in two APAS - Environmental Protection Areas, APA Costa dos Corais and APA de Guadalupe.

As it is a beach area and the city is inserted in two environmental protection areas, the work and pedagogical intervention's main objective was to hold an Environmental Education workshop. The action was guided by two specific moments approached during the process. The first was to identify the apparent concern with the students' environment and how to improve the way they care for it. The second was to relate such care with the municipality of Tamandaré-PE. The role of the school and the teacher to develop their practices for the rational development of the student, making them realize the importance of attitudes to better care for the environment and that they can later play skills that help in the process of preservation of the ecosystem present mainly in their city.

Still, it is essential to emphasize working in the beach context, considering that the environment is the main factor in development. According to Jacobi (2005), it is possible to show this generation its importance when facing nature and how they should be aware of their actions and impact either for good or evil, the environment, and society.

2. Materials & Methods

The work results from a pedagogical action to the elementary school students of the municipal Almirante Tamandaré, located in the municipality of Tamandaré, Pernambuco. As well explained in the previous section.

At the time, the class had 23 students. The activity followed in an interventionist manner, under the guidance of the teacher who conducted the discipline. At first, each student was asked to plan a class focusing on Environmental Protection Areas linked to Environmental Education.

Before the event, it was requested by the teacher that each one elaborates a material used in the moment-action. The material in question was elaborating a booklet on recycling garbage, which consisted of four points addressed and exemplified: Recycling and the environment; What is recycling; what the advantages of recycling are; what are the materials that can be recycled. At the time of the action, a class was given about the Environmental Protection Areas and the importance of keeping alive and conserved the present ecosystem. The class was energized from the speech of the students and of us teachers. During the discussion, the guiding question of the action arises: "What is the best way to improve the environment?", with this, a blank sheet of

paper was distributed to the class and asked that they, in their own words, describe a solution to improve the environment.

In the end, we asked for this piece of paperback, and we discussed what each one wrote in general, building a collective environmental awareness. The research had the qualitative method (Godoy, 1995). In the search for evidence, each student's information and knowledge analyzed the content (Bardin, 2011) and perceived its vision with the specific subject. Finally, our approach aimed at developing an exploratory study, which according to Selltitz, Jahoda, and Destsch (1974), allows us to discover ideas and solutions to become more familiar with the phenomenon of study.

According to Godoy (1995), qualitative research does not attempt to enumerate and/or measure the events studied, nor does it employ statistical instruments in data analysis. In other words, it seeks to obtain descriptive data about people, places, and their relationship processes, giving the researcher righter contact with the studied situation.

The content analysis, according to Bardin (2011), is a set of communication analysis techniques aimed at obtaining, by systematic procedures and objectives of the description of the content of the messages, indicators (quantitative or not) that allow the inference of knowledge related to the conditions of production/reception (inferred variables) of these messages. The construction of knowledge about Environmental Education constructs a straightforward pedagogical content or something that is only restricted to social actions. It can become a continuous habit with an awareness of the proper use and necessary preservation of nature. Aiming at a knowledge awareness that nature's concern is never restricted to groups of society or to certain places, plus a macro-level work that reaches everyone.

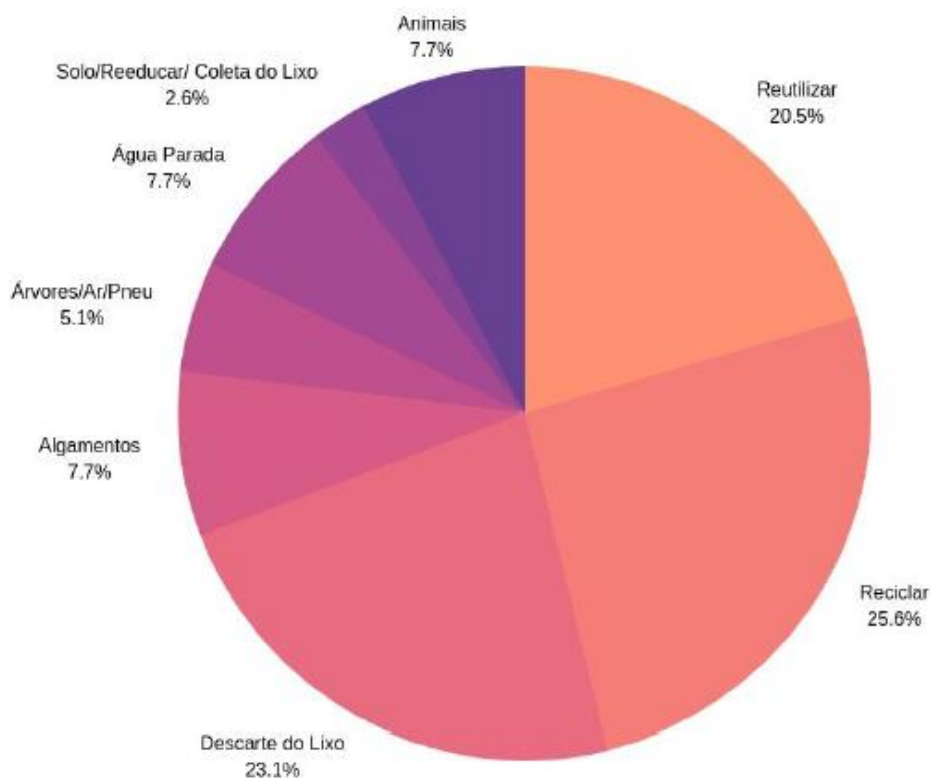
An important aspect and considering in this action were that working the human experience, as routine customs, as was the case with the care for the environment, is and is part of the educational process of the school, as assured by LDB (1996), which says the following:

Education encompasses the formative processes that develop in family life, human coexistence, work, teaching and research institutions, social movements and civil society organizations, and cultural manifestations. § 2º. School education should be linked to the world of work and social practice. (BRASIL, 1996).

3. Results and Discussion

Each student's guiding activity, each student, responded in their respective worksheet, which they thought most coherent to do in their daily life or in society to improve the environment's conditions. This answer was given through the class they had. We explained the importance of the Environmental Protection Areas, preserving the ecosystem, and the city's care. One of the moments that came up during the class was the correct disposal of garbage. Several students reported that this became a big problem in the city, lacking awareness of separating the garbage. In response to the activity, we saw several apparent concerns regarding this solution, and analyzing their lines, we observed some questions raised.

The following graph contextualizes the apparent concern that arose in the whole class, as we see below:

Graph 01 - The care that emerged in the solutions presented by the students.

By reading the four answers presented in this work, we have noticed some common ways and care in our daily lives. An expressive way the terms reuse and recycle appeared of students, and this showed us that there is a conscience in using again and giving another purpose to the object. The pet bottle appears as the object that can be most useful, as is said by one student, who presented the following solution: "We need to throw the garbage in its proper place to recycle the pet bottles, cans. We can also do several things with a bottle. We should not buy a snack other thing and throw in the street because it can rain and flood everything and this can harm us and the next, because if flood can enter the water in the houses and we can lose our furniture and lose everything we can then do not throw garbage in the holes". (8th-grade student). We infer from this answer that recycling and the concern of not throwing garbage in the streets bring this student the solution to a problem known to all, the issue of flooding and the entry of water into homes that leads to the loss of furniture household utensils.

There is a sensitivity when this student says that he can "lose everything we have achieved," we understand that the simple act of not leaving the garbage on the street already contributes to tragedies so that we can say, do not occur. It is important to emphasize that this student includes himself with the people who should do it and be careful with this disposal. He uses the "we." He has knowledge that is part of this environment, being fundamental for environmental awareness. According to Boff (1999), to take care of the planet, we need to go through ecological literacy and review our consumption habits. What matters is to develop an ethics of care. That is why each needs to understand himself as part of the place and community that is part of this care, this environmental awareness. The solutions presented by the students show us that this is present not only in the most scientific issues but also in the daily life of the human being. The

environmental issue is causally linked to how humanity seeks to produce and consume products aiming at its life's well-being. It results from numerous changes in natural systems, such as vegetation, climate, relief, soil.

The school has a fundamental role in creating a critical and sustainable environmental perspective for each student. As Gadotti (2008) says, we need to make a space of critical formation, and to educate to live in a network, to be able to communicate and to act in common, is to educate to produce cooperative forms of production and reproduction of human existence, to educate to self-determination.

In another solution presented, this time by a student shows the self-criticism and awareness of this problem is the responsibility of a specific community and the whole national society. The student next presents it: "We should not throw garbage in streets we should preserve the environment because in the future we will suffer serious consequences every time we eat something. We must throw it in the garbage or reuse it and not leave it lying around, and this only pollutes the environment and the rivers; also, many people do this with pet bottles, packages, and boxes. This goes from corner to corner until disappearing is some stay here for a while Brazil should be more aware to stop and think a little about our actions and recycle more what we use". (8th-grade student).

The school must provide a moment of reflection for the student, based on the knowledge shared by each one. In the case of the previous student, it was interesting that it brings a broader scope. In more consistent information, Brazil is one of the countries that signed the Agenda 21 agreement. According to the Ministry of the Environment (1992), the mobilization of the leaders of first world countries generated an agreement in which each nation should have its agenda, identifying and creating actions that generate the participation of the whole civil society. As a social measure, the School Agenda 21 was created through a partnership with the Ministry of Education to become a transformation instrument, including the school environment, family, and social environment. The change involves environmental issues and security, inclusion, and promotion of human rights values.

Another student showed us her concern in giving another use to some materials discarded in the garbage, such as the pet bottle, described as follows: "reusing the bottles as vases for plants, with this, we can also re-educate people" (8th-grade students).

We infer the student's response, the attention to the re-education of people. Environmental re-education contributes to the development of citizens about their behavior with the environment. Through knowledge, the individual can develop skills and attitudes related to the preservation of nature, which seek to mitigate the consequences of its actions on the environment in which it lives. This environmental re-education is extremely necessary to guarantee the future of the planet and its respective natural resources.

The care with the environment, work in education is part of the national curriculum parameters, which affirms the importance of a transversal and social work and responsibility to all inserted in the school community, teachers, students, employees, and community. According to PCN (1998): The term - medium environment has been used to indicate a -space (with its biotic and abiotic components and interactions). In human beings, the physical and biological space relates to the - sociocultural space because it lives and develops, exchanging energy and interacting with it. This interaction with the elements of their environment reveals types of modification with the passing of history. Furthermore, by transforming the environment, human beings also change their view of nature and the environment in which they live. (PCN/BRASIL, 1998, p., 233).

In the last answer, the student turned his attention to the role of the community and his responsibility with the disposal of garbage: "Let us preserve nature, we do not throw garbage on the street because not to provoke flooding for our municipality. The tires last about 60 years to get out of nature, so it is essential to recycle and do something to reuse to do something for ourselves that not even to put inside the house to make an ornament there already avoids this deforestation waste for our community." (Student of eighth).

Through this student's response, we understand the concern with a material, which is currently one of those that, if discarded in a wrong way in nature, bring serious problems. There was a mistake when he says

that it is 60 years for the tire to leave nature; it is estimated that it is almost 600 years for the material to decompose. So, there are measures to reuse the tire for other purposes, above even as the student himself presented, make something that serves as decoration in the homes. Tires can be 100% reused. The government of Brazil, in 2010, included the tire industry in the mandatory program for the adoption of Reverse Logistics, which is framed in Law 12.305/2010 Art.33 of the National Policy on Solid Waste.

In the students' responses, we see the most sensitive environmental awareness they have from their work experiences. Reading their solutions, especially those shown here, sees that their concerns and desires are the most significant repercussions, both in the municipal and state spheres and at the national level. The correct disposal of the simple pet bottle and its recycling is the care to avoid flooding by the garbage.

One point that causes the floods in Brazil, besides the rivers' courses and the lack of basic sanitation, the latter on the part of the competent agencies, is the anthropic action, and the lack of conscience in fulfilling its part regarding the disposal of the collective garbage. The students see that the drains' clogging is a problem for the municipality, contributing to a high pollution rate; in solutions, it presents cleaner drains.

In this sense, the sustainable practice linked to environmental education becomes necessary throughout the school. The students already build this sustainable awareness in the environment's care for their experience and didactic knowledge. For this reason, transdisciplinary work is pertinent and involves the whole school and its surrounding community. The children's environmental conscience helps us understand as adults our actions as a society that harm nature.

4. Conclusion

With this work, we have reached an idea of how the school students in question experience and worry about garbage disposal and how this process, if done in the wrong way, can cause several problems. Environmental Education cannot restrict the classroom; the school teaches education for environmental problems since an issue does not belong only to a single individual or space for discussion, which is the school.

Nature demands from the society the search to find new ways to provide new models of care with the environment, recurring to the goods consumed and produced that help to alleviate social inequalities and at the same time ensure the preservation and care with nature. Therefore, the concern with the environment and its preservation is individual and collective responsibility, either at the international level as creating Agenda 21 or the national, state, and municipal levels, with each one's creation and work's environmental skills.

Because it is a school located in a municipality with its most significant economic development on the beach, its residents must be responsible for preserving the ecosystem and the entire city's environment. Through the work developed in the school, the children propagate of right environmental actions to alleviate social inequalities and at the same time ensure the preservation and care of nature.

The school's intervention and in the class was part of the curricular component of the subject of Environmental Education, of the 5th period of the Degree in Geography, of the Federal University of Pernambuco, during the didactic excursion that took place from June 2 to 4, 2016. We emphasize that pedagogical practices, be they in specific isolated actions or part of the school subject, are essential for constructing mutual, individual, collective, and democratic education.

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