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SCHOOL GEOGRAPHY AND ENVIRONMENTAL AWARENESS ON THE CAPIBARIBE-PE RIVER

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Abstract: Most students show no interest in learning geography. It is seen by most students as a difficult and “rote” subject. It is therefore necessary for teachers to look for alternatives to make the subject more attractive. This article seeks to report on the teaching experience at the Joaquim Bezerra Municipal School, located in the Camboa District, municipality of Lagoa de Itaenga - Pernambuco, provided by the voluntary internship, in the only 6th grade class in Elementary School II. The aim of the voluntary internship was to provide students with a more dynamic and attractive school geography in order to facilitate the teaching-learning process. The methods used were lectures, field lessons and landscape readings, developed by the trainees, under the guidance of the supervising teacher and the teacher of the university internship subject. This work was carried out in order to conceptualize the curriculum guidelines, which are interwoven in the content of Geography and Environmental Education, in order to visualize teaching situations that could be developed in class. The content worked on with the students in the area of hydrogeography was river resources, which, linked to the reality of the students, the Capibaribe River, located 150 meters from the school, was a fundamental tool for building geographical knowledge and raising awareness among the students about the importance of rivers for human society and for the hydrological cycle. Using the interdisciplinary approach between environmental education and geography, which are directly interlinked, and by problematizing the lived space and the natural elements that make up the environment, it allowed the students to uncover other perceptions of nature so that they could become agents of change in society. In this sense, it was necessary to carry out educational practices to raise awareness of caring for rivers, the environment and their preservation.

Keywords: Capibaribe River, Geography teaching, Environmental education, Lagoa de Itaenga.

INTRODUCTION

There are many difficulties encountered in the classroom, both by students and teachers. Student disinterest is one of the main ones, so educators need to find ways of making lessons more interesting. Various methods can be used, such as group work, lectures, videos, field lessons, workshops and practical activities. These are possibilities that aim to meet the needs of curiosity and interest in learning.

The voluntary internship activities were developed with the aim of contributing to the students' teaching-learning process in a more dynamic and attractive way. In addition to showing that it is possible to plan activities that make classes more interesting and diverse, encouraging student participation in order to understand the content covered in class.

Not all the methods used by teachers in the classroom are always enough to ensure students' interest and learning. The proposed activities serve as a strategy and can help the teacher explain a subject that has already been or is currently being covered and bring it closer to the students' everyday lives. In this sense, the student broadens their thinking and knowledge and can generate discussions during the lesson. These lessons contribute to the construction of meaningful knowledge for the student, as well as increasing cross-cutting themes, such as the environment. It enables the development of skills and competences, allowing content to be worked on in the classroom and awakening students' interest in local problems. Simple and inexpensive activities can be introduced into everyday school life, making lessons more didactic.

THE ENVIRONMENT IN SCHOOL GEOGRAPHY

At school, the subject of the environment should be present in all subjects, as understanding it involves reading various other aspects of society such as politics, history, ecology, etc., but especially in geography, an interdisciplinary science that deals with various contents related to the study of society and the environment.

According to the National Curriculum Parameters for Geography,

A more detailed study of the major environmental issues (pollution, deforestation, limits on the use of natural resources, sustainability, waste) enables work on the spatialization of geographical phenomena through cartography. And also, working with statistics, databases, reading and interpreting graphs, which are important in comparative studies, simulations and the initial idea of planning that students may have. Also as procedural content, work on formulating hypotheses, producing graphs and maps, collecting, organizing and interpreting statistical data, practicing argumentation, etc. (PCNs 1998, p. 46).

It is clear that geography and the environment are related as long as society is always connected to nature. In this way, it is very important to ensure that, from this interaction, students have a critical notion of environmental preservation.

Based on these questions, it is clear that Geography tries to address environmental concepts in order to make its recipients change their attitudes and value the observation of facts and their criticality. According to Cavalcanti (2002), "Environmental Education, in the sense of training for life in the environment, is increasingly present in theoretical formulations and indications for teaching Geography". Considering that the paradigms for interpreting reality interfere in pedagogical work and directly affect what is intended to be

taught, it is pertinent to understand the theoretical and methodological foundations on which Geography teachers base their pedagogical practice with regard to Environmental Education, as well as an analysis of this praxis with regard to the relationship between Geography Teaching and environmental issues.

Therefore, in order to achieve effective awareness, education professionals, especially geography professionals, must be attentive to new pedagogical trends and improve themselves in order to better understand environmental issues. In this way, students can efficiently assimilate what the teacher really wants them to learn.

Teaching resources are first and foremost instruments used to build students' learning, i.e. the tools used by the teacher to facilitate the teaching-learning process. Any object or element of nature can be a resource, such as a textbook, videos, a tree, a river, etc., as long as it establishes a relationship of reciprocal interaction with the student in the construction of various types of knowledge, including geographical knowledge, i.e. it is the means to an end.

To learn the geography of things is to see that nature is not a dead mechanism, but a vast source of elements to be grasped through the affective and cognitive process. It is a learning space and, for this to happen, it is necessary to enter the world of observation, because observing is not just seeing. Therefore, in a given landscape we only observe what catches our eye. Piletti (2006) highlights the importance of teaching resources that bring teaching closer to the context of students' lives, emphasizing that for Geography:

Using teaching resources to facilitate learning is of great importance in any subject, but using these resources in Geography classes is even more important. Amongst this importance, one of the objectives of the resource that is most useful for teaching geography is that it helps to: "bringing the student closer to reality" (PILETTI, 2006, p.154).

It's up to the geography teacher to try to get his or her students to be able to relate in the best possible way to the space they inhabit and transform, learning content that requires a greater degree of abstraction, in other words, they need to have greater contact with local materiality. The use of these resources can make learning Geography more attractive and more dynamic for students who don't have much incentive to attend classes, and didactic resources serve as mediators between these contents and the students.

So we proposed practicing geography by experiencing the important Pernambuco river that drains the school. The Capibaribe River makes up the landscapes of 42 municipalities in Pernambuco, including the municipality of Lagoa de Itaenga, the focus of this study. The Capibaribe rises on the borders of the municipalities of Jataúba and Poção-PE, percolating through several urban centers and serving as a receiving body for industrial and domestic waste. In this way, it becomes an efficient tool for understanding the contents of various disciplines, especially Geography, a science that studies rivers through hydrogeography in basic education and allows concrete interaction with environmental issues.

In this way, the use of the river as a teaching tool in schools along its course becomes fundamental due to the need to act as an educational tool to improve the environment. Recognizing it as a learning mechanism, as well as using it to promote environmental education, makes it necessary to take effective action to improve and conserve this natural resource, which is so important to Pernambuco and its riverside inhabitants.

TEACHING GEOGRAPHY

Geography teaching enabled students to carry out a critical analysis of the reality of the place, as they faced up to the problems they face on a daily basis. Based on this reality, we sought to understand how pedagogical practices have contributed to the construction and reconstruction of Geography teaching in Basic Education. The content taught in school geography is marked by the fragmentation of knowledge and the distance from students' everyday reality. In this way, it is worth emphasizing that students learn mechanically, which does little to help them make sense of geographical knowledge. And Callai (2001) collaborates by stating that:

These are natural and human aspects of geographical space, translated into lessons on relief, climate, vegetation, population, rural exodus and migration, urban structure and life in cities, industrialization and agriculture, studied as abstract, neutral concepts, with no connection to the concrete reality of the students' lives. (CALLAI, 2001 P. 139).

The content should not only be studied for information, but mainly as a means of developing the capacity for geographical reasoning and the interpretation of socio-spatial phenomena. Geography is a strategic discipline in which, initially, the construction of learning is based on the consideration of the reality experienced in everyday life in order to seek out various questions that lead the teacher to adequately carry out explanations inside and outside the classroom.

The occurrence of difficulties is related to the way didactics and methodologies are used in school geography. Although there are difficult situations faced by teachers, such as low pay, unqualified initial training, excessive working hours, as well as the problem of indiscipline and the absence of the family in the task of educating, teachers must look for alternatives to overcome and transform the reality in which they find themselves.

GEOGRAPHY AND PRACTICE

Geography, like other subjects, has specific contents, many of which are basically worked on theoretically. However, all school content has its application in life and everyday life, and this process occurs regardless of the subject.

Teaching practice can influence the organization of the space in which each person is inserted. Geography is the form of study that allows us to observe the current model of the landscape. (CAVALCANTI, 2002 p. 55, 56)

Trying to apply content to practice is an important ally in achieving learning, since the student is able to materialize what is seen superficially in theory. To achieve success in learning this subject, the teacher can establish an activity that follows on from the content taught.

Regardless of the content, the best thing to do is to always try to provide students with real conditions to get to know everything that is described in the textbooks and reproduced by the teacher. An attitude like this favors greater development, as well as bringing the student closer to the subject, since it becomes more attractive to the student. “[...] instead of a merely descriptive geography, the new times give way to a reality experienced by the student and their situation in this context.” (Santos 2010, p.25)

The practical lessons in the classroom and in the field, outside the four walls of the classroom, which integrate the student with the theoretical content, are well represented in the Cartographic Literacy proposed by Silva (2023), who experiences the compass rose through ciranda circles, sung music and dance. The activity culminates in the creation of a mosaic in the rose drawn from dots, lines and dashes. This mosaic is filled with elements collected from the local landscape, such as leaves, twigs and petals, and the work takes on volume, three-dimensionality, color and smell. The azimuth, cartographic orientation and

bearing are carried out with the product made by the student, expressing a classroom practice with harmony and interaction between the geographical content and the environment.

In this sense, the geography teacher has the challenge of broadening the student's understanding of the space they experience. In this scenario, the introduction of different resources and methodologies are teaching tools that will facilitate the teaching-learning process. It also makes the class more attractive for the students, who often feel discouraged by the routine of the lessons.

Creating different activities such as lectures, trails and fieldwork provide students with a more interesting way of learning. By carrying out these practices, students will become more interested in the activities of Geography classes, as well as helping to broaden their knowledge.

ACTIVITIES CARRIED OUT AT JOAQUIM BEZERRA MUNICIPAL SCHOOL

The Joaquim Bezerra Municipal School is located in the Camboa district, in the municipality of Lagoa de Itaenga, Pernambuco, approximately 150 meters from the Capibaribe River. The proximity between the school and the river was a determining factor in carrying out this research, which was conceived together with the volunteer internship's supervising teacher.

The content of the geography course, river resources, the inclusion of the students' reality in the school's environment and the environmental problems exposed in the Capibaribe, were taken into account, and in a way were crucial for encouraging participatory local environmental education. However, three activities were carried out in the 6th grade, a single class, at this school.

A) LECTURE

The lecture, entitled “There’s a river in my school yard”, was given during Geography lessons, after the content on river resources had been explained by the supervising teacher and developed by the trainee, with the aim of listing the physical, historical, economic, environmental and social characteristics of the Capibaribe River. In addition to presenting the municipalities that make up the river, its relevance to the riverside population, and its usefulness to society, highlighting the local fishermen and the people involved in harvesting shellfish and old vines in Brasília Teimosa in Recife.



FIGURE 1. LECTURE/PRESENTATION OF THE DOCUMENTARY CAPIBARIBES.

Source: Lucas Alves, 2017.

For the lecture, we used an image projector, a computer, a speaker, and aired the documentaries: “Capibaribes”, produced by Canário Caliari, produced by the Boa Vista Olho da Rua Filmes Institute, and “Cadê o rio que estava aqui?”, produced by Jéssica Renata, produced by the audiovisual axis, with the aim of showing the students the reality in which they live through audiovisual resources.

B) FIELD CLASS

The excursion took place on the banks of the Capibaribe River, on the border between the municipalities of Carpina and Lagoa de Itaenga. Due to the short distance between the school and the river, the students took a walk to the site, with the aim of getting to know and discussing the current state of the river, the environmental situation experienced by the inhabitants of the riverside area and the visual aspects of the riverside landscape, such as the amount of garbage, the visual quality and flow of the water in the riverbed and, finally, the issue of river life, the animals that live in the river, the capybaras and the riparian forests that were supposed to occupy the banks of this important spring.



FIGURE 2. EXCURSION TO THE BANKS OF THE CAPIBARIBE RIVER

Source: Bruno Henrique, 2017.

During the excursion, the students showed a lot of participation by asking questions and making comments, as well as behaving well.

C) LANDSCAPE READING

After the didactic excursion, the students were encouraged to record the elements that were present in the landscape of the Capibaribe River, through drawings made in class, so that with this practical action, they could remember what they had experienced in the field, expressing on paper what they could memorize from the cutout of the landscape experienced in the field, the geography of the place around the school in class.



FIGURE 3. READING THE LANDSCAPE AND PRODUCING A DRAWING

Source: Lucas Alves, 2017.

The students then created a panel with their drawings, making it possible to display their knowledge, practices and experiences of geography in the field in the school environment, showing a living geography to the community in which the school is located.

RESULTS

The different activities developed through the voluntary internship in Geography classes can contribute to the teaching-learning process. At the Joaquim Bezerra Municipal School, the students agree that it is important to carry out different activities to help them learn, not only in Geography, but also in other subjects.

As part of the activities carried out to support the research, a quantitative survey was carried out with the students who took part in the three experiences, with the aim of finding out which of the activities we practiced with them they enjoyed the most.

The survey was carried out with 30 students. 64.38% said they enjoyed the field activity more, 26.02% said they were more interested in reading the landscape and assembling the panel and 9.6% said they enjoyed the lecture more, as shown in the graph below.

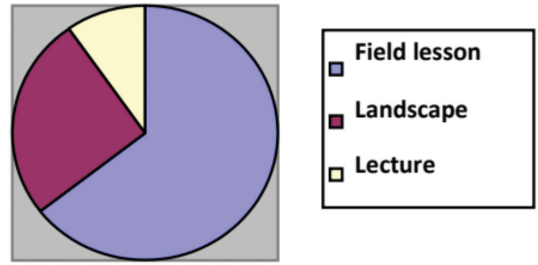


FIGURE 4. GRAPH OF THE SURVEY ON THE ACTIVITIES CARRIED OUT

Source: Lucas Alves, 2017.

The students were most interested in the field activity, which according to them was not only different, but also took place outside the school so they had contact with the world. The other two activities were well attended and took place inside the school during geography lessons.

The study was based on revealing this view, investigating the availability and interest of students, understanding them as potential participatory subjects for environmental management. This study makes contributions to the school environment, to school and environmental managers and to the population, allowing for a greater understanding of the environmental problems experienced and belonging to the local reality, as well as providing reflections on the rational use of natural resources and on acting as an educational tool.

FINAL CONSIDERATIONS

In the course of the activities carried out in Geography classes and with the results obtained, we found that the majority of students visualized the Capibaribe River in their reality in the vicinity of the school, demonstrating to the vast majority a feeling of concern about the reality of the river, which could be used didactically and effectively in classes.

In the single 6th grade class at the Joaquim Bezerra Municipal School, an acceptable percentage of students participated in the activities proposed within the school. Approaches

to the Capibaribe River that other subjects could take better advantage of the local context, being close to the river, to study various scientific contents.

The school's potential for environmental education and for practicing the content of approaches to the problems experienced in the local context is clear and could be put to better use. We see the school here as a space for the formation of participatory subjects, including students who are very open to par-

ticipating in activities aimed at preserving the Capibaribe River.

However, the challenge of building a participatory society makes it necessary to articulate the population's participation in formal and non-formal discussion spaces, and only by encouraging the school community to act in an articulated and conscious manner will it be possible to make progress in what is currently known as "participatory".

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