



Experience report: Environmental awareness and reflection in an indigenous community through workshop and conversation circle

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ABSTRACT

Indigenous communities have a lifestyle linked to nature, considering the resources available within their borders (ALMEIDA *et al.*, 2016). However, with the advance of urbanization, it is possible to observe environmental problems resulting from the lack of selective garbage collection, basic sanitation, and pollution of water bodies (LOUZADA *et al.*, 2022).

Keywords: Borders, Indigenous communities.

1 INTRODUCTION

Indigenous communities have a lifestyle linked to nature, considering the resources available within their borders (ALMEIDA *et al.*, 2016). However, with the advance of urbanization, it is possible to observe environmental problems resulting from the lack of selective garbage collection, basic sanitation, and pollution of water bodies (LOUZADA *et al.*, 2022).

In this context, Environmental Education (EE) should favor and provide appropriate attitudes and values for the preservation and promotion of the lives of indigenous communities, as they are inserted in



the reality of global society and require EE that responds to their problems and needs (SILVA; OLIVEIRA, 2012). According to Colombo (2014), recognizing environmental education from a local perspective makes the population focus on the problems that are closest to them and therefore can be alleviated more quickly through direct participation and, as a consequence, the problems understood as global: the greenhouse effect, global warming, among others, are also being alleviated.

EE initiatives in the Amazon region, such as lectures, workshops, projects and environmental programs have been reported on solid waste, organic waste, composting and the use of vegetables (SILVA; COMASSETTO, 2023). However, there are no reports in the literature of workshops developed with the Nazaré indigenous community in Piauí. Currently, this community has the CCA (Center for Agroecology Coexistence), which works on environmental issues in a contextualized way. One of the objectives of the project is to raise awareness among children and young people, through socio-environmental and cultural activities, about the importance of valuing the space where they live, preserving natural resources, practicing a more sustainable agriculture without the use of pesticides, promoting food and nutritional re-education, thus improving the quality of life of all involved.

Gomes and Higuchi (2020) state that socio-environmental awareness begins as a set of sensations stimulated by sight, hearing, or touch, which allows the production of any type of image when inserted in living environments. This image is marked by feelings and allows us to say that we see, hear, or perceive something by touch. Thus, working with extracts of plant pigments collected in the community can also contribute to the perception of students as belonging to the environment, which facilitates the contextualization of the importance of plants and soils in the context of their conservation, as well as emphasizes that the lack of resources cannot be a factor that prevents the use of paint in these communities and avoids the disposal of packaging of paints that are sold.

2 OBJECTIVE

The objective of this research was to use ecological paint as a resource for Environmental Education aiming to raise awareness for the conservation of plants and soil through a pedagogical workshop, as well as to carry out a conversation circle to understand the main challenges that the CCA faces to develop its environmental actions.

3 METHODOLOGY

The CCA (Center for Agroecology Coexistence) operates in the Nazaré community, located in the interior of Lagoa de São Francisco, Piauí. The average age of the young people who participate in the CCA varies between 7 and 14 years old, with the coordinator Dinayana Kelly Uchôa do Nascimento being the main responsible for environmental activities.



The workshop was held to produce eco-friendly paints based on vegetable dyes. To this end, a demonstration of the making of ecological paint was carried out and the students gathered in groups, made their own paints. The seriguela leaves were macerated the beets were grated, and the saffron was mixed directly with the water as a solvent and then the glue was added. To acquire the black tone, charcoal was used. After preparing the paint, the students developed an artistic work of painting on a sheet of A4 legal paper with the help of a brush. After this stage, a conversation circle was held to discuss the projects already developed in EE and the main challenges and possibilities for the development of new EE projects.

4 DEVELOPMENT

The ecological workshop was conducted in a dialogued and interactive way. The students stayed in the external area of the CCA where they were explained about the main characteristics of the pigmentation of vegetables, knowledge necessary for the elaboration of the paint. We reiterate that the various parts of the vegetables and their chemical composition are mainly responsible for their variability of tones and texture when ready (Figure 1).

The students showed a lot of interest in making the paint, which is in agreement with the work of Silva *et al.* (2022) Activities developed with paints are common in children's lives, but the use of natural paints, such as soil or plant-based paint, presents another dialogue in relation to the subject-environment. For rural education, children's contact with soil paints is essential for the understanding of other soil uses, and also for the diversity of colors and types, influencing the conservation of these soils.

Figure 1. Workshop stage of ecological paint production with vegetables.



Source: Own authors.

Through the activity with plant-based paint, it was discussed with the students about the importance of plants for food production, diversity and reproduction of animals, conservation of rivers and the care that



everyone has to have with the environment. After elaboration and painting, the drawings were shared with everyone (Figure 1).

During the conversation circle, the students highlighted as positive points of the project the dialogues and the acquisition of knowledge about the production of seedlings and its importance in the generation of oxygen through photosynthesis, as well as in the theme of composting, indicating a comprehensive perspective of sustainable agricultural practices. Previous studies also point to the importance of inserting this theme of vegetable garden production to arouse students' interest in environmental and food issues (SILVA; COMASSETTO, 2023).

As we explored with the students about the gaps in the project, it became clear that the lack of resources figures as one of the main challenges. The lack of funds has a direct impact on activities, such as travel and projects that require the acquisition of materials. Notably, Dinayana Kelly Uchôa do Nascimento, the person in charge of the project in the community, is financially committed to making the necessary purchases, evidencing an exceptional commitment. However, the mobilization of the community, local government, and partner entities is essential to ensure the continuity and expansion of the CCA, allowing it to reach a wider audience.

5 FINAL THOUGHTS

It is concluded that the experience of the undergraduate students during the visit and collaboration in the CCA workshop will greatly contribute to the future pedagogical practice in the development of extension practices together with this indigenous community. This work allowed the students of the higher education course and the participants of the indigenous community to rethink concepts and attitudes related to Environmental Education, as it was possible to transform natural resources into pedagogical materials, the taste for artistic making and respect for nature.



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