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Research Article

Reflection on the Implementation and Operation of the Anhanduí Ecological Park - Anhanduí Environmental Education Center in Campo Grande/MS

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Abstract

In facing urban expansion, actions were necessary, such as creating Urban Parks and Environmental Education Centers (CEAs), making them a reality in contemporary Brazil. In Campo Grande (MS), the public power created four CEAs in the 2010s, located in Linear Parks (Urban Parks), spaces rich in water sources, local flora, and fauna. This research aimed to identify the guidelines for implementing and operating the CEA Anhanduí and analyze the participatory activities advocated by the Municipal Environmental Education Program (PMEA) according to the current conservationist Environmental Education. The research found that the CEA has a physical structure, appropriate equipment, and a multitasking manager, but it still does not have a Pedagogical Political Project and a Sustainability Plan.

Introduction

Observing the present situation of environmental degradation and the urgency of the quality of human life, Environmental Education has faced the challenge of contributing to a fairer and more sustainable society, which is why it has become a tool to raise awareness of the socioenvironmental problem. For Carvalho, Fernandes, and Lopes [1], the recurrent impact caused by anthropic action have increasingly severe results, so the need to explore socio-environmental relationships has become essential. Environmentally just and sustainable societies must promote the renewal of the society-nature binomial, related to ethics in which environment conservation associated with environmental justice predominates. In this vein, Environmental Education dedicates to multiple subjects in the most varied spaces, such as the Environmental Education Centers.

The Public power had to carry out and apply actions to face the disorganized urban expansion, such as creating Environmental Education Centers (CEAs), which have become a reality in the Brazilian states. According to Silva (2004), the first CEAs in Brazil were those in São Paulo and Rio Grande do Sul in the 1970s.

In the city of Campo Grande, there are eleven watersheds, spaces in which the Urban Parks and the physical infrastructure of the Environmental Education Centers are located (Figure 1).

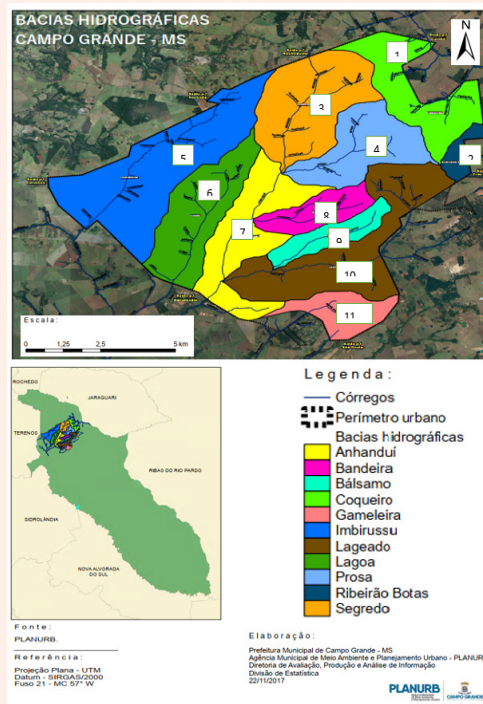


Figure 1: Watersheds of the Urban Area of Campo Grande/MS.



Considering these spaces, this study aimed to:

- a) Identify the implementation and operation guidelines of the Anhanduí Ecological Park - CEA Anhanduí
- b) Analyze the participatory activities and themes developed by CEA Anhanduí from 2017 to 2019
- c) Identify the currents of Environmental Education advocated by the Municipal Environmental Education Program (PMEA) based on the parameters of currents suggested by Sauv  [2].
- d) In the execution of these objectives, the text configures as follows: theoretical support, methodology, and description of the analysis.

Theoretical Contributions

Evidence indicates that the first discussions about Environmental Education happened after the Second World War. In Brazil, the environmental issue began to emerge from the 1970s onwards. Environmental transformations came to the fore in this period, with the advance of urbanization resulting from industrial intensification and the consequent exodus of the rural population to urban centers.

The United Nations Environment Program (UNEP) recommended, in 1972, the development of Environmental Education as one of the fundamental elements in combating the global environmental crisis. This education program aims to develop the collective awareness of the world population in favor of environmental conservation through knowledge, skill, and attitude aimed at solutions to socio-environmental problems. Environmental Education, therefore, has its importance recognized in international and national documents. In Brazil, some legal devices to support this initiative at the federal and state levels are Law no. 6.938/81 - National Environmental Policy [3], Law no. 9.795/99 - National Environmental Education Policy [4] and Law No. 5.287/18 - State Policy on Environmental Education (Mato Grosso Do Sul, 2018). Here, the Environmental Education Centers of Campo Grande - the capital of the state of Mato Grosso do Sul - are spaces that develop practical actions of Environmental Education such as interpretive trails, contemplative activities, production of didactic material, community projects, and scientific projects, as they are located in hydrographic basins, inserted in urban parks, aiming to maintain water resources, fauna and flora of the city. Madureira & Tagliani [5] observe that the environmental education practices developed in these spaces are predominantly conservationist. However, the essential thing would be to advance participatory, transforming, and emancipatory practices, which involve the inseparability between the natural, cultural, and social environments.

Loureiro [6] conceives Environmental Education as "an educational process of building full and planetary citizenship, which aims at the quality of life of those involved and the consolidation of an ecological ethics". Critical Environmental Education transforms the space involved, transforming social actions, facilitating the analytical process regarding the mechanisms of society-nature relations, and considering socio-historical time and the territory. Sauv  [2] considers fifteen currents of Environmental Education in two large groups - the old currents of thought and the recent ones. In the first group, the author identifies seven lines, characterized in Table 1.

Table 1: Group of Ancient Currents of Environmental Education.

Current	Characteristic
Naturalist	Values contact with nature, from where learning and understanding of ecological problems come from.
Conservationist/ Recursist	Concerned with the conservation of natural resources, the management of resources through collective projects of reflection on consumption. It considers that environmental goods are resources, many of which are scarce, which is the reason for the Recursive terminology.
Resolutive	It is close to the conservationist. It emphasizes solving environmental problems through behavioral change and collective projects which aim to identify issues and evaluate solutions.
Systemic	Based on an overall view, it analyzes the constituent elements of an environmental system, the interactions between them, and the causal relationships.
Scientific	The environment is the object of knowledge and encourages the hypothetical-deductive or experimental method, based on which it is possible to elaborate hypotheses and seek proof.
Humanist	Emphasizes the human dimension in its cultural, historical, and aesthetic aspects, among others; the biophysical elements of the environment recede into the background.
Morals/Ethics	The emphasis is on developing environmental values to know about the other and oneself; it relates to the individual ethical reference system.

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Considering that the old currents are currently promoted in legal provisions, in scientific debates, and practiced in Environmental Education actions in the state of Mato Grosso do Sul and in Brazil. According to Sauv  [2], in the field of Environmental Education, different discourses on the subject propose different ways of conceiving and practicing educational action. In the second group, Sauv  [2] identifies eight currents, as characterized in Table 2.

Table 2: Group of Recent Trends in Environmental Education.

Current	Characteristic
Holistic	It develops the multiple dimensions of your being in interaction with the set of elements of the environment. It develops knowledge of the world and participatory action in and with the environment.
Bioregionalist	Socioecological movement focused on the (eco)economic dimension of the "management" of the environment. Develop skills in the community, local or regional eco-development.
Praxis	It develops reflection skills. Learning in action, through action, and for improvement.
Criticism	Social dynamics where environmental realities and problematics are at the base. Deconstruct socioeconomic realities to transform the cause of the problems.
Feminist	Denunciation of power relations within social groups and political and economic fields. Emphasis on the power relations that men still exercise over women in specific contexts. Integrate feminist values into the relationship with the environment.
Ethnographic	Concerns the culture of populations and communities with the environment. It valorizes the cultural dimension of its relationship with the environment.
Eco-Education	Experience the environment to experience and form oneself in and through it. Build your relationship with the world, with other beings that are not human. It is the educational perspective of Environmental Education.
Sustainability	Economic Development at the basis of human development, the rational use of resources.

Considering the multiplicity of currents of Environmental Education, there are differences, which can be decisive in the results of an educational intervention, and there may be proposals from the most conservative to the most liberating. Finally, we highlight the importance of Sauv 's work in environmental education, as it offers elements for recognizing the diversity of proposals, which represents giving power of choice to educators, students, and professionals according to their ideological positions [1]. In this perspective, the Eco education Current stands out when considering the Environmental Education Centers of Campo Grande and the current policies for the implantation and operation of these spaces.

This current is dominated by the educational perspective of Environmental Education. It is not a question of solving problems but of taking advantage of the relationship with the environment as a crucible for personal development, as the basis for meaningful and responsible action. The environment is perceived here as an essential sphere of interaction [2]. The educational perspective of Eco education Current highlights the importance of transforming Environmental Education, as different points of view can contribute more and better to an environmentally fairer society in all spheres, whether social, political, or economic. Finally, there is an emphasis on the significance of Sauv 's work for Environmental Education as it offers subsidies for recognizing the diversity of currents and proposals, thus representing the power of choice to environmental educators according to their ideologies.

Methodologies

Scientific research seeks to understand the phenomena and conflicts of practical life and, to that end, makes inquiries, linking thought and action. As a data collection method, document analysis was present, which, according to L dke & Andr  [7], can constitute a valuable procedure for approaching qualitative data, either complementing the information obtained by other techniques or revealing new aspects of a theme or problem. The documental analysis described here had as an object of study the Municipal Environmental Education Program [8-10] to collect data on the participatory activities and the themes worked on at CEA Anhand , considering the period from 2017 to

2019 and the currents of Environmental Education advocated by the PMEA and CEA Anhanduí, a Conservationist/Recurist Current [2].

The CEAs in Campo Grande are under the Municipal Secretariat for the Environment and Urban Management (SEMADUR) in the Division of Inspection, Sustainable Policies and Environmental Education (DFPE), Environmental Education sector. The implementation of Environmental Education policies and projects has been carried out by the Municipal Agency for the Environment and Urban Planning (Planurb) through the Sector for Inspection of Green Areas and Environmental Postures and Inspection of Sustainable Policies and Environmental Education (DIMA). In this context, starting in 2017, the Municipality of Campo Grande has annually published the Report on Environmental Education Actions in the Municipality of Campo Grande/MS as an integral part of the Municipal Environmental Education Program (PMEA), containing the annual Environmental Education activities and actions carried out within the municipality intending to score with the Ecological ICMS Program.

The Municipal Environmental Education Program contains principles inherent to the continuous process of Environmental Education. According to the PMEA [11], one of them advocates that, Environmental Education must be broad, multidisciplinary, and intersectoral. Its basic assumption is the protection of the environmental good, the greater good, fundamental to a healthy quality of life, and, therefore, for this reason, it constitutes a citizen's rights and duty. The Municipal Environmental Education Program has four axes: Environmental Education Centers (CEAs), Itinerant Environmental Education, Strengthening Collective Spaces for Reflection and Action, and Events. The activities and actions developed in the four axes take place through partnerships and agreements with private companies, public agencies, NGOs, and universities. The participatory Environmental Education actions promoted in the municipality of Campo Grande involve different sectors of society; the objective is to train citizens to be aware of their rights and duties and capable of committing themselves to minimize the environmental impacts existing in the municipality's territory.

Analysis Description

According to the Manual for the Implementation of Municipal Environmental Education Centers [12], "the objective of the Environmental Education Centers is to gather and systematize information and knowledge related to the environment to implement programs and regional Environmental Education projects". Considering the regional characteristics, these spaces are still multifaceted. According to the classifications provided in the Brazilian Network of Environmental Education Centers (REDE CEAs, 2018), CEA Anhanduí is an Interpretation and Visitor Center (Class 1). In Campo Grande, CEA Anhanduí has physical space and equipment but still does not have a Political Pedagogical Project (PPP) or a sustainability strategy, in addition to not having an educational team, given that it only has one multitasking manager.

The Anhanduí Ecological Park was created by Law 3.762/2000 [13], has an extension of approximately 15 hectares, is located at the confluence of Córrego Bandeira and the Anhanduí River (Figure 2), considered the first municipal urban unit of environmental preservation. The Anhanduí Ecological Park was revitalized in 2013 for implementing the CEA Anhanduí to develop activities of reflection and experience of sustainable practices.

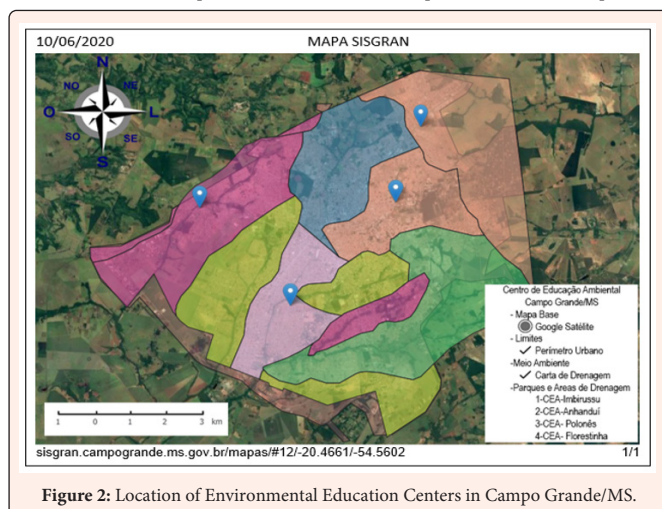


Figure 2: Location of Environmental Education Centers in Campo Grande/MS.

Activities happen through participatory methodologies, such as lectures, debates, events, meetings, theaters, technical visits, ecological pranks, field classes, training courses, scientific research, among other things. These participatory methodologies take on the Conservationist Current, which according to Sauv  [2]. It concerns the conservation of natural resources and the management of resources through collective projects of reflection on consumption. It considers that environmental goods are resources, many of which are scarce, which is the reason for the recurist terminology. According to the Municipal Environmental Education Program (PMEA)/2018, the Ecological Park and CEA Anhanduí have, among their objectives, to protect the headwaters and banks of streams, ensuring the conservation of points where water recharges occur; enable the development of monitored contemplative activities, social technologies and Environmental Education, in addition to allowing actions of a scientific nature.

According to this same program, the topics discussed at CEA Anhanduí are environmental education, selective waste collection, solid waste, composting, recycling, community gardens, wildfires, ecological trails, urban green areas, urban trees, water resources, CUs, preservation, inspection and environmental management, flora, and fauna, dengue, soils, among others [8]. The reflections, now expressed, around the ideas of Sauv  [2], as well as the activities carried out at the Anhanduí Environmental Education Center listed in the Municipal Environmental Education Program of Campo Grande [8-10], lead us to believe that the lived and transformed space between the person and their environment is not unique, as it is the one where relationships with the world wove. The environment forms, deforms, and transforms us, at least as much as we form, deform, and transform it. In accepted or rejected reciprocity, our relationship with the world occurs. On this frontier (of space and time), the foundations of our actions towards the environment are elaborated. In the space between the person and the other (it is a person, an animal, an object or a place), each responds to the vital challenge of "being in the world". This expression "being in the world" allows us to understand that the being is nothing without the world in which they live and that the world is a set of beings that populate it. Examining the "being in the world" is to enter into what forms the relationship of each one with their environment. Little explored by environmental education, all their problems are, nevertheless, in the reconnection, the eco-dependence, and the meaning each one gives to their existence [2,14].

Now, people relationships with the world are what they are and how they are! In other words, everything existing in the spaces currently experienced reflects these actions, which often form, transform and deform humanity, the environment in which they live, and nature, configuring the socio-environmental model, fundament in space and time.

Final Considerations

Considering the Municipal Environmental Education Program-PMEA, the participatory activities carried out, and the themes debated at CEA Anhanduí, when analyzed under the parameters suggested by Sauv  [2], "the dominant conception of the environment, the intention of Environmental Education, privileged approaches and examples of strategies" the current of Environmental Education practiced in this CEA is Conservationist, and, or Recurist.

For Filho & Garcia [11], the great challenge of these spaces is to use the available resources to leverage Environmental Education, moving away from conservatism towards a more complex reading of the world. The appropriation of knowledge related to environmental causes needs to be inserted in this critical context for a change in the socio-environmental reality to be possible. In this sense, the Political Pedagogical Project of CEA Anhanduí, when built, will be able to broaden the conception of the role that this Center for Environmental Education can fulfill with the society of Campo Grande, bearing in mind that the PPP seeks to promote dialogue between the community, the environmental educators and CEA, through reflections on the Environmental Education practiced, the society that one wants to build and where one intends to reach with the actions of this Center [15-17]. Therefore, in the case of CEA Anhanduí, critical and emancipatory Environmental Education, when practiced, can contribute to the conservation and restoration of urban spaces, such as parks, watersheds, and springs, in the mediation of conflicts and defense of those that suffer from the consequences of the current impacts and environmental degradation installed in these spaces.

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