

Environmental education trends and concepts of actions registered in SisEA/MS and carried out in Ladário/MS

Maria Rita Mendonça Vieira ^I
Angela Maria Zanon ^{II}

Abstract: This investigation seeks to analyze the concepts of Environmental Education (EE) in the proposals registered in the State System of Information on Environmental Education of Mato Grosso do Sul (SisEA/MS), carried out in the municipality of Ladário, State of Mato Grosso do Sul, Brazil. The research with a quantitative-qualitative approach deals with the document analysis of 27 proposals. The quantitative nature involved the evaluation of indicators: status of proposals, type of action, themes and target audience. The qualitative approach was given by the Discourse Analysis (DA), evidencing the conceptions in EE. The conservative aspect was predominant in the actions, with a view to a behavioral change of the individual, disregarding the socio-political dimension. The inferences brought here show ways to overcome practices that follow conservative trends in EE, in the search for practices that seek to transform reality. It is necessary to (re)think the methodological procedures of the actions, considering the theoretical foundations, themes and target audience for a critical and transformative EE.

Keywords: Critical Environmental Education; Conservative Environmental Education; Speech analysis; Conceptions; Mato Grosso do Sul.

^I Universidade Federal de Mato Grosso do Sul, Campo Grande, MS, Brasil.

^{II} Universidade Federal de Mato Grosso do Sul, Campo Grande, MS, Brasil.

São Paulo. Vol. 26, 2023

Original Article

DOI: <http://dx.doi.org/10.1590/1809-4422asoc20210172r2vu2023L1OA>

Introduction

The debates surrounding environmental issues concentrated their discussions, until 1980, with the preservation of natural resources as a priority. Since then, a critical movement to the naturalistic thinking of environmental education (EE) has begun, focusing on discussions of social and political aspects, of the causal relationship of the environmental crisis, which involved the unequal concentration of wealth in the world (REIGOTA, 2017).

The environmental crisis highlights a crisis of civilization, or structural crisis, and has an intrinsic relationship with the capitalist way of production (AGUDO; TOZONI-REIS; TEIXEIRA, 2018). In this context, EE practice is tensioned by analyzing the causes and effects of the planetary crisis, implied in the adoption of conceptions about the environment and EE and the implementation of pedagogical practices with distinct purposes.

According to Guimarães (2013), EE, as one of the dimensions of the educational process, reflects the “social worldviews”, whether more conservative or more critical. Sauv   (2005), when discussing the various ways of understanding the EE, reflects on how to characterize the possible EE to identify those that suit our context of intervention and inspire our own practice? Such thinking motivated the research question for the proposal of this study, implying the urgency of identifying approaches to EE practiced.

Carvalho (2004) indicates the ethical-political position from different points of view in their political-pedagogical principles, determining the various perspectives in EE. Rodrigues and Guimar  es (2011) highlight the importance of the differentiation between the Conservative and Critical EE (CEE) approaches, taking into account their approximations and even other tendencies that unfold from them, or may arise.

Conservationist EE dominated the educational context in Brazil until the 1990s. It was established due to the scientific logic that treated environmental issues isolated from social and political issues, reducing the complex phenomena of this reality. The conservative character of education reflects a naive vision, focused on the conservation of natural resources and with ecological awareness as part of the resolution of environmental problems, also inserted in this naive conception of EE. That is, in its theoretical and methodological proposals predominate a compartmentalized, individualistic, and apolitical vision, reinforced by the logic of traditional education, not reflexive and problematizing (GUIMAR  ES, 2013). According to Guimar  es (2007b):

This education cannot and/or does not want to notice the networks of power that structure the relations of domination present in today’s society, both between people, between social classes, and in the “north-south” relationship between nations, as well as the relations of domination that have been historically built between society and nature. It is in these relations of power and domination that we can find one of the pillars of today’s environmental crisis (GUIMAR  ES, 2007b, p. 35).

Since the 1990s, Brazilian EE has shifted from a predominantly conservationist

profile, recognizing the social dimension of the environment and differentiating the conservationist approach...

[...] by understanding that the predominance of educational practices that invest in children in schools, in individual and behavioral actions in the domestic and private sphere, in an ahistorical, apolitical, content-based, and the normative way would not overcome the hegemonic paradigm that tends to treat human beings as a generic and abstract entity, reducing the condition of causers of the environmental crisis, disregarding any social cut-out (LAYRARGUES; LIMA, 2014, p. 29).

In this perspective, conservationist practices do not discuss the causal relationship of environmental issues, disregarding the social and political aspects, and reinforce the correction of behaviors, in the sense of environmental training. The literature in EE has already exhausted the discussion about environmental education activities at school, for example, and that still presents the predominance of occasional actions, addressing general environmental themes without discussing the complexity of these different themes. This problem requires a categorical reflection aiming to overcome the occasional and immediate practices that want to change thinking and behavior without changing the objective reality (TOZONI-REIS; MAIA, 2014).

In this reductionist view, theoretical and methodological proposals are formulated from controversial definitions of the conceptions of environment and environmental crisis, which reinforce the logic of traditional education.

It is observed, in fact, that the *modus operandi* that predominates is that of occasional actions, decontextualized from the generating themes, frequently detached from a pedagogical proposal, without questioning the civilizing pattern, just re-feeding a simplistic and reductionist vision (JACOBI, 2005, p. 244).

Loureiro (2006) admits that EE cannot be considered transformative *per se*, generalizing the emancipatory perspective to any educational practice. This premise translates the shallow impressions about the meaning of EE, which is still perceived by the lay community as the objective of raising people's awareness (LAYRARGUES, 2012).

The educational process should be conceived in an autonomous, collective, and transformative perspective of society and of the citizens themselves, and it cannot be limited to a content-based character, as warned by Guimarães (2004). The educational process via EE is, above all, permanent, in which individuals and communities become aware of issues relating to the environment and produce knowledge, values, and attitudes that may enable them to act, individually and collectively, in order to transform the structural causes of the environmental crisis. Making this process possible implies a CEE and emancipatory, which goes beyond "teaching" good behaviors, and is committed to changing values and transforming society (PINTO; GUIMARÃES, 2017).

CEE has its roots in the democratic and emancipatory ideals of critical thinking applied to popular education, which breaks with a technicist conception of education (CARVALHO, 2004). Lastly, education through emancipation allows the learner to build knowledge and criticize values based on his reality and, by critically confronting different values in search of a personal synthesis, it will reflect on new attitudes (GUIMARÃES, 2007a). Given these aspects, the environmental issue, understood by its public and political dimensions, should have as a priority means of confronting an educational process in a critical and Freirian vision (LOUREIRO, 2019).

The paths of the identity of the CEE were marked by the strong insertion of educators who worked in popular education, from the critical and liberating pedagogy of Paulo Freire. From this perspective, the educational act ceases to be the transmission of knowledge, and it gains centrality in the educational praxis itself, with the inextricability between theory and practice in human activity, aware of the transformation of the world and self-transformation (GUIMARÃES, 2004).

This EE under construction in a counter-hegemonic movement is critical of the scientific-mechanistic paradigm that informs modern urban-industrial society; critical of its development model, its production mode, with its multiple determinations of social reality, which is materialized in the proposal of a modernization that is conservative and also promotes, according to its rationality, the direction to a single understanding of the world, creating meanings, for example, about sustainable development - which characterizes the notion of sustainability as a field of dispute (GUIMARÃES, 2004, p. 46-47).

With the consolidation of the CEE, the reflexive positioning becomes the guiding of educational practices, whether in social movements, communities, schools, public policies, or in the implementation of projects, for example, of the instruments of public environmental management (LOUREIRO, 2019). Layrargues (2020) manifests about the actions undertaken in the field of Brazilian EE since it is not possible to continue indifferent and alienated in the face of the profound environmental regression that we witness in Brazilian institutions, naively announcing a conservative and individual practice of the good examples of sustainability.

In the context of practices in non-formal EE, carried out in the municipal public sphere, is that this research is inserted, as part of the studies of a doctoral thesis in development. The reflections of the actions in EE contribute to the improvement of practices and public policies that involve EE. In this sense, we present a discussion about the analysis of proposals in EE that are registered in the State System of Information on Environmental Education of Mato Grosso do Sul (SisEA/MS), a tool of the State Policy of Environmental Education of Mato Grosso do Sul (PEEA/MS).

EE in Mato Grosso do Sul and the research design

The Environmental Institute of Mato Grosso do Sul (IMASUL) has been inserting non-formal EE in the context of PEEA/MS and its instruments, such as the SisEA/MS, the State Program of Environmental Education (ProEEA/MS), the Interinstitutional Commission of EE (CIEA/MS), and the State Diagnostic of EE (Deea/MS).

SisEA/MS is an electronic database built to promote the registration, integration, systematization, analysis, and monitoring of programs, projects, campaigns, and other EE actions, as well as disseminate information through the records of EE proposals executed in MS, by various proponents, from the public or private sphere (IMASUL, 2020a). The construction of SisEA/MS is based on the principles of democracy and communication established in the National Policy of Environmental Education (PNEA) and the National Program of Environmental Education (ProNEA) (BRASIL, 2018). As a public policy, it is considered a milestone in the regulation of EE in MS.

ProEEA/MS highlights other legal procedures articulated with the implementation of SisEA/MS, such as the registration of the Environmental Education Program (PEA), required in the environmental licensing Process, in addition to the possibility of registering EE actions performed by municipalities participating in the ICMS Ecological Program (MATO GROSSO DO SUL, 2018). Thus, IMASUL has been improving strategies and procedures in the field of EE, in an articulated way, ensuring the affirmation of the field of EE as a state public policy.

SisEA/MS constitutes a database, accessible to citizens, with information on Environmental Education actions and projects developed in the territory of Mato Grosso do Sul. Any citizen can access and observe the registered projects and, in addition to these, especially, public agencies, companies that work with environmental management and other entities with an interest in the area. Still, “those companies that need to submit an Environmental Education Program (PEA) for the environmental licensing of enterprises can consult SisEA/MS frequently in order to follow the actions of Environmental Education and in them inspire their own” (MAMEDE et al., 2021, p. 501).

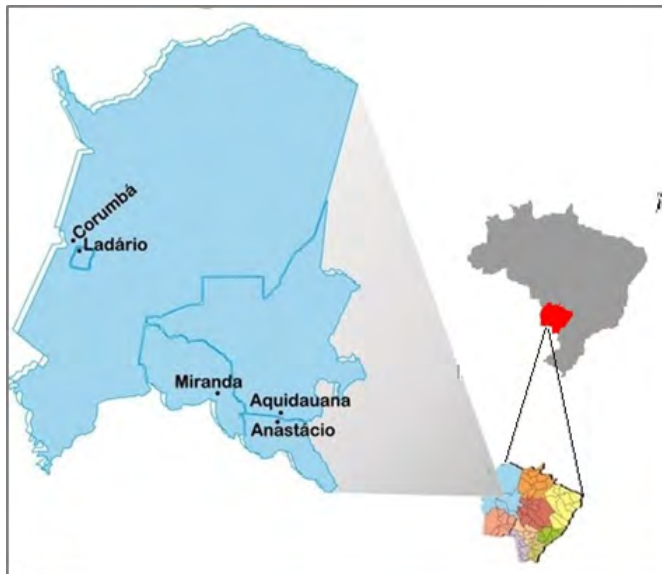
The ICMS Ecological Program is one of the criteria for the distribution of resources relating to the Tax on Operations Related to the Circulation of Goods and Services on Interstate and Intercity Transport and Communication (ICMS) among the municipalities of MS that integrate Conservation Units (CU), and indigenous lands ratified, or still, prove the integrated management of solid waste (IMASUL, 2020a).

The ICMS Ecological Program contributes to the quality of public environmental management in the municipalities of MS, with the fundamental objectives of increasing the size of protected areas and the quality of their conservation, improving solid waste management, and promoting fiscal justice (MATO GROSSO DO SUL, 2014). In this context, EE proposals must be registered in SisEA/MS by the municipalities and be evaluated by IMASUL according to the quantity and type of action inserted. The assessment will correspond to a score that, added to the other criteria of the ICMS Ecological Program,

will determine the financial transfer to the participating municipality (IMASUL, 2020a).

The discussions about the proposals in EE registered in SisEA/MS could demonstrate the theoretical frameworks based on the various practices performed by environmental educators in MS and indicate how the EE is performed by the proponent within the municipal public environmental management. Therefore, the scope of this study is to analyze the proposals registered by the municipality of Ladário, located in the Pantanal region, state of Mato Grosso do Sul, Brazil, through participation in the ICMS Ecological Program (Figure 1).

Figure 1 - Location of the municipality of Ladário, Pantanal Region, Mato Grosso do Sul



Source: adapted by the authors based on Semade, 2015.

Understanding the paths of EE in the Pantanal region becomes essential given the relevance of its social, environmental and economic characteristics, considered the largest wetland on the planet, located in the Paraguay River Basin, and characterized by the influence of the phytoecological regions of the Cerrado, Amazon, Chaco, and Atlantic Forest. Furthermore, it is considered the Pantanal was declared a Biosphere Reserve by UNESCO in 2000 and has been the focus of great discussions about the loss of natural areas, mostly converted to anthropic use, such as pastures and agriculture (SEMADE, 2015). Thus, it becomes crucial the initiatives and environmental management programs aimed at the implementation of Conservation Units, such as the Environmental Protection Areas, for example, the APA Baía Negra, located in Ladário/MS.

METHODOLOGY

The descriptive research, with a quantitative and qualitative approach (BOGDAN; BIKLEN, 1994), was conducted from the documental analysis (PIMENTEL, 2001) of the proposals in EE registered by the municipality of Ladário/MS in the SisEA/MS. The quantitative and qualitative treatments were given by the complementarity of the results, enriching the analysis and final discussions (MINAYO, 1997).

The corpus consists of the 27 proposals in EE registered in SisEA/MS by the proponent, defined as “finalized” with the activities closed so that the results will not be altered/edited by the proponents (IMASUL, 2020b).

The content of the proposals was extracted in full from the SisEA/MS and systematized in a registration form with identification codes (L1...L27), where the element “L” indicates the initial of the municipality of Ladário, followed by the numerical order of the proposals. The quantitative aspect of the research is due to the frequency of occurrence and distribution of the indicators represented by the parameters: type of action, themes involved, and target audience reached. The quantitative approach subsidized the discussions of the qualitative approach, allowing the complementarity of quantitative and qualitative aspects between objectivity and subjectivity: “The quantitative study could generate issues to be deepened qualitatively, and vice versa” (MINAYO; SANCHES, 1993, p. 247).

The qualitative evaluation, with the definition of the textual indicators (textual elements) taken from the documental corpus, evidenced the theoretical tendencies in EE, through the Discourse Analysis (DA) (PÊCHEUX, 1990), in the perspective of the CEE. The documental analysis reflects on the discourses announced by the proponents, which are materialized by the textual elements in the referred socio-educational proposals. The qualitative approach is necessary because EE involves complex and dynamic phenomena, and methodological procedures only quantifiable could simplify the intended analysis, not making it possible to deepen the fundamental issues of the study (LUDKE; ANDRÉ, 2012).

The DA was defined as a methodological reference using the materialist analysis, the historicity, and places of the meaning of the defined documents, in order to elucidate the issues presented in this study. Ideology is understood as the positioning of the subject when he/she is affiliated to a discourse, being the process of constitution of the imaginary that is in the unconscious, that is, the system of ideas that constitutes the representation; the history represents the socio-historical context and the language is the materiality of the text, generating “clues” of the meaning that the individual intends to give (ORLANDI, 1999).

It was established that the textual elements or textual statements, which represent the discursive formations defined by Orlandi (1999), to support the discussions regarding the ideological formations and branches of EE brought in the context of the excerpts highlighted. The discourse analysis is performed considering the context of production of the EE proposals, in a conception of intertextual analysis of the material, and that influences the materialization of the proposals inserted in SisEA/MS that, in

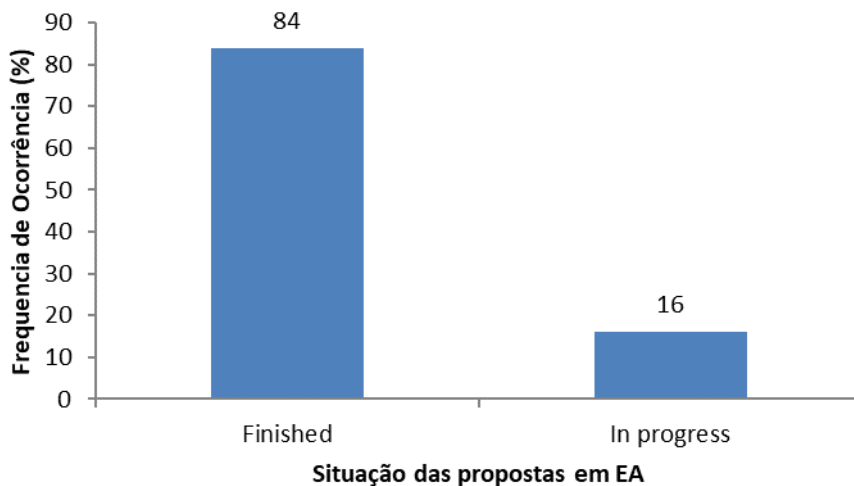
turn, demonstrate the theoretical perspectives of the currents in EE, which translate the ideological representations.

The discussions of the theoretical framework, through the DA, seek the historicity, the confrontation of meanings, and reflections on the ideological positioning (conservative and critical approaches) configured in the proposals of EE. According to Loureiro (2006), the CEE is anchored in the Critical Theory of Knowledge principles, which also influenced several authors who discuss this perspective of EE in Brazil (GUIMARÃES, 2004; LOUREIRO; LAYRARGUES, 2013).

RESULTS AND DISCUSSIONS

It is registered in SisEA/MS, between 2015 and 2020, 679 proposals for the demand ICMS Ecological Program among the 79 municipalities of MS. Among the 32 proposals registered for the municipality of Ladário/MS, we present in this research the analysis of 27 (84 %) proposals, defined as finalized (Figure 2).

Figure 2 - Frequency of occurrence (%) of proposals registered for the demand ICMS Ecological Program in Ladário



Source: prepared by the authors based on data available in SisEA/MS, IMASUL, 2020a.

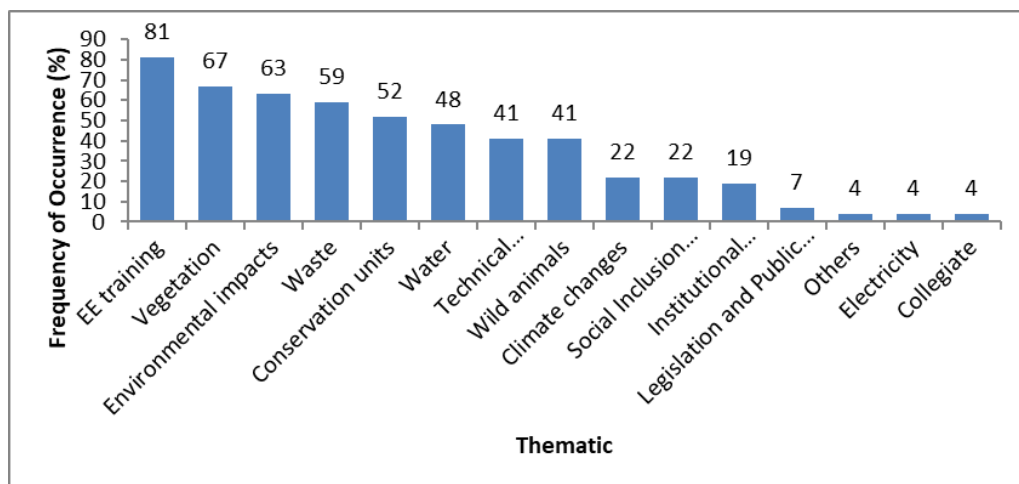
We verified that 95% of the proposals are of the “occasional action” type, as they deal with a single activity aimed at raising awareness among the target audience and are not linked to the obligation of continuity (IMASUL, 2018). Therefore, it is necessary to evaluate the scope of proposals of the type “occasional action” in order to understand what type of EE is developed in the context of public environmental management and how they ensure a permanent EE when performed in an occasional way.

According to Jacobi (2005), the conservative approach predominates in occasional

actions, decontextualized from the generating themes, without questioning the civilization pattern, as observed in the commemorative actions analyzed in L4, L7, L8, L9, L11, L12, L14, L15, L20, L22, L24, and L27. Such proposals show discourses of an EE that is not concerned about reflecting and intervening on the origins and causes of the environmental crisis but only in combating its most visible and direct manifestations, and that demonstrates an ideological positioning of social reproduction of the current society model to remain essentially unchanged (LAYRARGUES, 2012).

We verified the approach of a variety of issues pertinent to the field of EE (Figure 3), discussed simultaneously in the proposals. That is, each proposal can present more than one theme addressed. This analysis signals how the actions contextualize or not local limiting situations.

Figure 3 – Frequency of occurrence of the themes addressed in the proposals registered in the “finalized” situation for the demand ICMS Ecological Program in Ladário/MS



*27 proposals were analyzed (n=total). Of these, the themes were presented simultaneously in more than one proposal. Therefore, the percentages exceed the total of 100%.

Source: prepared by the authors based on data available in SisEA/MS (IMASUL, 2020a).

We observed that most of the proposals dealt with training in EE (81%) for various audiences, whether within the community, school community, and employees, especially teachers, ensuring the principles and objectives of the PNEA and PEEA/MS.

Article 4th - The environmental dimension must be part of the curricula for teacher training at all levels and in the proposals for continuous training. Sole Paragraph. Teachers of public and private educational institutions of all levels and modalities of education must receive complementary training with the purpose of adequately meeting the fulfillment of the principles and objectives of the State Policy of Environmental Education (MATO GROSSO DO SUL, 2018, p. 2).

Article 4th - The basic principles of environmental education are: [...] V - the guarantee of continuity and permanence of the educational process; Article 8 - The activities linked to the National Policy of Environmental Education should be developed in education in general and in school education, through the following interrelated lines of action: [...] I - training of human resources (BRAZIL, 1999, p. 3).

The basic principles of EE in the PNEA are related to the importance of the articulated approach to local, regional, national, and global environmental issues (BRASIL, 1999, p. 3). In this sense, we will discuss the context of the forest fires theme, inserted in the field “Environmental Impacts,” understanding its relevance to the local, state, and national environmental agendas widely discussed for the Pantanal biome, especially in 2020 (MIRANDA; MARTINHO; CARVALHO, 2021). The proponent of Ladário/MS contemplated this theme in the local discussions and was present in the excerpts¹ of four proposals: L24, L25, L27, and L14. In L24, the activities carried out are described:

In the Opportunity Educational Lectures on Conservation Units, Management Plans, Controlled Burning, and Wildfires, Involving Several Partners Such as: Embrapa, UFMS, Secretary of Social Assistance, Secretary of Housing, Traffic Agency, IBAMA/Prev. Fire (IMASUL, 2020a).

In L25, the activities are highlighted in the following excerpt:

A biologist from the environment foundation went to the private school Objetivo, in order to lecture on environmental impacts: causes, consequences and solutions [...] In the lecture the themes of deforestation, burning, air pollution by fossil fuels and pollution of rivers were addressed (IMASUL, 2020a).

In L27, the forest fires theme was addressed, along with other subjects, in a didactic intervention of the lecture type.

Training course for volunteer forest fire brigades - apa bn², held on 05/06/2019 and 09/06/2019: ecoa and the national center for prevention and combat of forest fires (prevfogo), of IBAMA, held the training course for community fire brigades, in the environmental protection area (apa) Baía Negra (IMASUL, 2020a).

In L14, we observed actions with the articulation of the agency responsible for fighting fires (IBAMA/PREVFOGO), in an activity of the awareness-raising type by bringing the community together with the institutions during the event “8th Anniversary of the creation of the Baía Negra APA 2018”. In this scenario, the involvement of agencies such as IBAMA, the sector responsible for carrying out activities related to the prevention of fires (PREVFOGO) and the non-governmental organization (Ecoa³) is preponderant for the articulation between the various sectors of society. The viability of EE proposals,

1 - The highlighted excerpts for the qualitative analyses were taken from the contents presented in the proposals in EE registered in SisEA/MS, and were transcribed in this paper according to the original text, respecting the errors and inconsistencies present.

2 - The proponent refers the acronym “apa-bn” to the nomenclature of the CU Environmental Protection Area-Baía Negra.

3 - The proponent refers the acronym “Ecoa” to the non-governmental organization named Ecology and Action, with strong action in MS, focusing on the Pantanal, Cerrado, and Paraguay-Paraná System of Wetlands biomes.

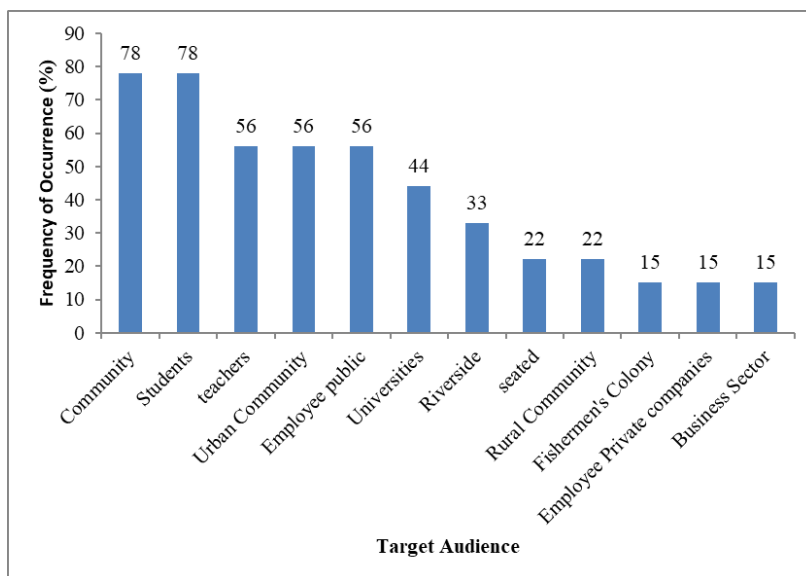
based on dialogues widely established by the institutions and social groups involved, strengthens the educational actions, as described in L27 and L14.

However, only the articulation does not guarantee the effectiveness of EE, it is necessary to consider the methodological procedures of the educational practice, supported by the epistemological and pedagogical conceptions of EE, in a critical and transformative perspective, searching for a more effective educational process (REIGOTA, 2017).

When one talks about the construction of the pedagogical act, one is talking about a process that goes from planning to its realization. The pedagogical act, action, process, educational action, teaching-learning process, or educational practice is the place where the principles of any educational proposal are put into practice. Therefore, “it is about putting the speech into practice, even showing how this practice is loyal to the enunciated concept” (QUINTAS, 2009, p. 42).

The evaluation of the indicator target audience does not deal with the number of individuals per category, for example, the number of students. Instead, the analyses show the occurrence of each target audience (category) involved in the total of the 27 proposals analyzed. For example, most of the proposals involved the target audience types “community” and “students,” representing 78% of occurrence for each, and “teachers,” “urban community,” and “public employees,” with 56% of occurrence for each among the 27 proposals (Figure 4).

Figure 4 - Frequency of occurrence of the types of target audience involved in the proposals registered in the “finalized” situation, for the demand ICMS Ecological Program in Ladário/MS



*27 proposals were analyzed (n=total). Of these, the categories were simultaneously involved in more than one proposal. Therefore, the percentage results exceed the total 100%.

Source: prepared by the authors based on data available in SisEA/MS, IMASUL, 2020a.

The proposals in EE registered by the municipality of Ladário/MS occurred preferably in the school context. It is necessary to be cautious about proposals implemented in the educational field, considering the contextualization of the themes and pedagogical practices that were not formulated in a discussion within the political-pedagogical project and even by professionals outside the school community.

Considering the effectiveness of EE proposals when practiced by social actors other than the school's teachers, we highlight Guimarães' (2004) position on EE projects that, when aimed at children and young people, in most cases tend to reproduce practices focused on changing the individual's behavior, often out of context with the social and environmental reality in which the schools are inserted, thus remaining caught in the "paradigm trap". According to Guimarães (2006), the paradigmatic trap refers to a comprehensive limitation of the educator for being tied to a (paradigmatic) fragmented, simplistic, and reduced view of reality, and that manifests (unconsciously) a limited understanding of environmental issues through a weakened pedagogical practice of EE, and that reproduces the traditional conceptions of the educational process, not very effective for intervening significantly in the process of transforming the social and environmental reality and building a new environmentally sustainable society.

When educators become hostages of the paradigmatic trap, we notice the naive vision in the proposals analyzed, resulting in actions rooted in the principles of what is known as Conservative EE. Although, according to Guimarães (2003), the educator who does not seek an intentional action of critical reflection tends to reproduce an "environmentalized" discourse that accompanies these naive practices, "[] this discourse and these practices are reflections of co-optation, of the dominant rationality that suppresses the political dimension in its intentionality of generating critical practices, as a cause and consequence of a critical reflection" (GUIMARÃES, 2003, p. 95).

When not problematizing the social issues that permeate the environmental aspect, the proposals in EE become distant from the conflicts, revealing the ideological intentionality and not environmental and educational, which structure their actions in EE. The lack of engagement with local causes translates the liberal and conservative logic, obstructing the critical and emancipatory thinking, with the absence of agendas and themes that should confront it, for example, as the theme "water" inserted in the proposals L01, L02, L07, and L08.

We realize in the analyses that the educational processes are focused on accountability and transformation of individual behavior and do not notice the inherent conflicts and complex relationships between cause and effect of the issues addressed. Guimarães and Medeiros (2016) add that, in order to overcome these practices that fit into a conservative perspective, it is necessary to seek the rupture of this paradigmatic trap. That is, "it is necessary to provoke the estrangement of the dominant vision through critical reflection that is fertilized in the differentiated joint practice and that promotes new concrete and symbolic conditions that allow the perception and experience of a differentiated pedagogical experience" (GUIMARÃES; MEDEIROS, 2016, p. 53).

We registered in the analyses the realization of interventions such as lectures,

sports practice, home visits, educational blitz, fairs, distribution of pamphlets and seedlings of native species, contemplative walks, technical visits to the university and federal institute, comic book and drawing contests, and storytelling. The interventions should be better clarified about the pedagogical perspectives applied. Understanding the intentionality of the practice allows aligning the interventions to the conceptions because often, the expository classes are related in a content-based perspective, but can open space for reflection and participation of those involved, as long as the educator defines his methodology for citizen participation in solving problems, in a reflexive and critical perspective (REIGOTA, 2017).

According to Tozoni-Reis and Maia (2014), these “projects” or occasional “activities” disregard the theoretical and methodological production discussed in research that constitutes the field of EE since the approach seems uncommitted to the construction and appropriation of environmental knowledge, characterized by recreational activities, such as distribution of seedlings and pamphlets present in the analyzed interventions. As discussed by the authors, these practices empty the potential of an EE more committed to the transformation of society and constitute isolated actions disconnected from local problems.

We observed nine proposals with actions focused on the APA Baía Negra, demonstrating an interest of the proponent in involving the local community in the management of the CU. However, such practices signal a naturalistic conception, not relating the environment to local social and cultural issues, for critical thinking on environmental conflicts. In L4 and L5, the activities were directed to the contemplation of nature with the intervention of sports practices, according to the following excerpt:

Therefore, we promoted a sport-nature demonstrative circuit with the modalities of cycling, rustic race, motorcycle trail and stand-up paddle, where the athletes could glimpse a new possibility or route of sports and leisure practices with contemplation, preservation and environmental conservation (IMASUL, 2020a).

In L5, the actions had a pedagogical purpose focused on the environmental management of areas with disease vectors:

The elimination of possible focuses the proliferation of the dengue vector occurred during the campaign conducted in the municipality [...] the agents carried out: - visits to the 6000 properties in the municipality, handing out flyers and guiding the resident about care with rabies, dengue and chikungunya; - removal and disposal of solid waste with mosquito (IMASUL, 2020a).

In L7 and L12, the excerpts “[...] there will be exhibitions of photographs, equipment, scientific, educational, informative materials, and crafts on the stands [...]” and “[...] the action took place during the week that celebrates the Tree Day in the square September 2, on the occasion were distributed about 170 seedlings of native and exotic trees [...]” (IMASUL, 2020a), highlight interventions such as the distribution of seedlings and holding events, in a conservationist perspective of EE. Finally, actions L8 and L26 intended to raise awareness through drawing contests.

[...] we held a poster contest with the children, where the theme was solid waste

and the environment; we collected recyclable material, held mini-lectures to pass on the information and educational about the treatment, packaging, disposal and the route of the garbage collection truck (IMASUL, 2020a).

[...] a drawing contest was promoted with the participation of only local children. In this sense, the activity developed provokes a feeling of belonging and love for the place because each child, convinced of its importance in the environment, positively influences the community in the most varied areas of activity (IMASUL, 2020a).

On the other hand, in L27, continuous training of educators of the municipal education network was carried out: “[] we set aside a full day in order to present to the technicians in education from smel what a conservation unit is, what the apa baía negra is, the potential of the region, the film baía negra: lives of the pantanal and then a tour of the apa bn” (IMASUL, 2020a).

The excerpts reveal the discourses of methodological procedures and educational interventions supported by conservative conceptions of EE. According to Layrargues and Lima (2011), when characterizing the three political-pedagogical macro-tendencies of EE, the expressions of the conservationist currents relate to some educational dynamics focused mainly on the sense of environmental perception.

The Conservationist macro-tendency may be perceived in Formal, Non-Formal, and Informal Environmental Education, and which is present in practices in the context of protected areas and conservation units, in ecotourism activities, and sense of perception in natural environments with strong expression of biodiversity. It has a very strong harmony with the age group of children in school age, in the perspective of working the idea of love for nature, in the logic of “knowing to love, loving to preserve,” touching slogan very present (LAYRARGUES, 2012, p. 399).

The EE, called conservative, is based on a pedagogical practice focused on the individual (the part) and the transformation of one’s behavior (individualistic and behaviorist education), which were demonstrated in the descriptions above. In addition, the conservative perspective focuses on immediate results, reinforced by the textual discourses presented: “Shop owners more committed and aware of the Waste They Generate (L1)”; “Decrease in the Incorrect Disposal of Waste Generated by the Food Court (L9)”; “Population More Enlightened About Conservation Units And Aware About Burning, Fires Among Other Actions (L24)”; and “The proposed objective was achieved when we managed to mobilize the community to stimulate their children to participate in the proposed activity (L26)” (IMASUL, 2020a).

The discursive elements report that the objectives of the proposals were achieved. However, the textual discourses do not present how the objectives were achieved, for example, the awareness of shop owners about waste generation. Besides, we verify the constancy of objectives always aimed at “raising awareness” of individuals from naive practices discussed by Tozoni-Reis (2006) and Pinto and Guimarães (2017).

The most critical awareness process is understood by its public and political dimensions, and it must have as a means of confrontation an educational process, in a critical and Freirean perspective, with an individual and collective dynamic, with dialogue,

knowledge, affections, and worldviews (LOUREIRO, 2019). In this sense, “[] to raise awareness is not simply to transmit ‘green’ values from the educator to the learner; it is, in fact, to enable the learner to critically question the values established by society” (GUIMARÃES, 2007a, p. 32).

The discourse focused on individual accountability refers to the conservative approach since it considers that individual and environmentally correct attitudes could lead to a collective change for a sustainable planet. Loureiro (2019) states that environmental themes and issues are not neutral or susceptible to be solved only by technical intervention or individual desire. The conservative point of view as a determinant for new attitudes is evident when the proponent establishes the relationship of environmentally correct attitudes to the subjects who understand new conduct from the moral judgment about the environment.

These described results indicate that the action’s purpose is focused on acquiring new knowledge for behavioral change, disregarding EE as an educational process. From this point of view, we understand that the activities are directed to the achievement of knowledge retained in a proposal of “banking education” for a behavioral change of the individual, with reports that aim at specific changes in behavior with the supposed acquisition of a new “environmental awareness.”

Through the DA, it was demonstrated that the actions based on an educational process with a behaviorist perspective, conservative and fragmented from reality, given that the proposals in EE presented methodological procedures directed to environmental awareness that seeks to inform or teach an applied knowledge for a new environmentally correct behavior, such as reducing the use of natural resources, in a logic of individual accountability. In the field of EE, in a political dimension, the meaning of “Awareness” only fits when applied by the Freirian perspective (LOUREIRO; TORRES, 2014), which diverges from the proposal presented.

Loureiro (2019) portrays that the activity itself does not define the vision of EE with which one works because it is necessary to understand in what sense the approach provokes educational relations in the educational process. In a more conservative conception, the purpose of the action is in the immediate sense of individual behavior, in the direction of acquiring knowledge for correcting an attitude. On the other hand, when the purpose of the action turns to critical and reflexive citizen formation, it breaks with a vision of technicist education and knowledge replicator (CARVALHO et al., 2004). The activity becomes the means that, when articulated with other actions, in a problematizing pedagogical path, will be able to reach the objective.

Conclusions

The analyses are a sample of the doctoral research in progress, which can be added to the discussions that will be held at the end of the thesis under development. In summary, SisEA/MS meets the communication requirements for EE, established by the ProNEA guidelines, by providing a system capable of registering and making available

information about the various proposals in EE carried out in the state of Mato Grosso do Sul. We understand that SisEA/MS is an important instrument of the PEEA/MS by making available information from the proposals made in the state of MS to the public in general, to environmental educators and managers, assisting them in conducting public environmental management, and for the construction of their educational practices.

The quantitative analyses showed that most of the proposals occurred from occasional actions, such as commemorative events or isolated lectures, compromising the continuous nature of the educational process. The occurrence of themes was accumulated between “formation in EE,” “environmental impacts,” and “solid waste” and preferably targeted the school community. We observed a variety of interventions used, from proposals with indications of the conservative approach of EE, since educational practices contemplate an EE based on the individual and the naturalistic conception of the environment.

The qualitative analyses demonstrated a tendency to carry out practices preferably with school audiences in activities outside formal education, in a conservative perspective of EE. The objectives of the proposals analyzed were given in the search for individual behavioral change in the face of attitudes through “learning” new knowledge for the “awareness” of the target audience in an individualized manner (individual accountability) and not reflexive, which goes against the construction of the socio-environmental knowledge.

We identify the conservative conception in the pedagogical practices analyzed, considering that the educational activity is tied to the technical teaching to correct environmental issues without, before, a reflection on the causes of these problems, and/or articulated with the social-historical-environmental context unveiled by the DA. Even if the interventions are aimed at environmental awareness and perception, these do not determine the critical conception of EE, being considered only the beginning of a long journey towards the awareness process and not the end in itself. It is necessary to consider the political dimension (of collective commitment), of values, and citizenship for the effectiveness of actions in a transformative and critical perspective.

The DA reveals that the way the concepts of environment, environmental crisis, and EE are understood by the proponents and executors of the analyzed proposals follow the conservative approach of EE. The conservative and critical theoretical and methodological conceptions, which historically come from common concerns about social and environmental problems, are present in the proposals analyzed. It is a fact that even today, Conservative EE perpetuates educational practices based on a reproductive and content-based pedagogical approach. However, new disputes have led this epistemological path of education to a new perspective of a critical, transformative, and emancipatory EE.

We understand that, the CEE is not configured as a tendency to supplant the conservative approach or as the only way to “save” the planet. According to Tozoni-Reis (2007), the principles of the educational process, under the critical view, create conditions to face the structural crisis we are experiencing every day. We conclude that Critical EE is a possibility to achieve the idealized changes, of a just and egalitarian society, by treating the educational process as coherent to the desires and demands of the issues

presented in the current context, aligned with a critical, reflexive, transformative, and restless proposal to the modern society model.

In the context of EE practices that are inserted in SisEA/MS, is that this research elucidates reflections on the role of SisEA/MS, as public policy in EE, and the pedagogical conceptions of the proposals, conducted by agents representing companies, entities, and institutions in the public and private sphere, which are registered in SisEA/MS. The inferences and points brought in this study shows ways to overcome practices that follow pedagogical tendencies reinforced by the contradictions and inequalities produced by capital, which are established in local and global contexts. Therefore, it is necessary to (re)think about the methodological procedures of actions, especially in the context of the municipality of Ladário/MS, considering the theoretical framework, definition of themes, and target audience, for the consolidation of an EE with critical and transformative purpose.

References

- AGUDO, M. DE M. ; TOZONI-REIS, M, F. DE C.; TEIXEIRA, L. A. Reflexões sobre a educação no projeto de aprofundamento do neoliberalismo no Brasil. **Revista Pedagógica**, v. 20, n. 45, p. 182-206, 2018.
- BOGDAN, R. C.; BIKLEN, S. K. **Investigação qualitativa em educação**. Porto: Editora Porto, 1994.
- BRASIL. **Lei n.º 9.795**, de 27 de abril de 1999. Política Nacional de Educação Ambiental. Brasília: Presidência da República, 1999. Disponível em: portal.mec.gov.br/secad/arquivos/pdf/educacaoambiental/lei9795.pdf. Acesso em: 2 jun. 2017.
- BRASIL. **Programa Nacional de Educação Ambiental (ProNEA)**. Ministério do Meio Ambiente (MMA). Ministério da Educação (MEC). 5. ed. Brasília: MMA, 2018.
- CARVALHO, I. C. de M. Educação Ambiental Crítica: nomes e endereçamentos da educação. In: LAYRARGUES, P. P. (coord.). **Identidades da educação ambiental brasileira**. Brasília: Ministério do Meio Ambiente, 2004, p. 13-24.
- GUIMARÃES, M. Educação Ambiental Crítica. In: LAYRARGUES, P. P. (coord.). **Identidades da educação ambiental brasileira**. Brasília: Ministério do Meio Ambiente, 2004. p. 25-34.
- GUIMARÃES, M. Armadilha paradigmática na educação ambiental. In: LOUREIRO, C. F. B.; LAYRARGUES, P. P. L.; CASTRO, R. S. de. (Orgs.). **Pensamento complexo, dialética e educação ambiental**. São Paulo: Cortez, 15-29 p, 2006.
- GUIMARÃES, M. **A dimensão ambiental na educação**. 8. ed. Campinas: Papyrus Editora, v.1, 2007a.

- GUIMARÃES, M. A Formação de Educadores Ambientais. 3ª ed. São Paulo: Papirus. 2007b.
- GUIMARÃES, M. Por uma educação ambiental crítica na sociedade atual. **Revista Margens Interdisciplinar**, v. 7, n. 9, p. 11-22, 2013.
- GUIMARÃES, M.; DE MEDEIROS, H. Q. Outras epistemologias em Educação Ambiental: o que aprender com os saberes tradicionais dos povos indígenas. **REMEA-Revista Eletrônica do Mestrado em Educação Ambiental**, p. 50-67, 2016.
- IMASUL. Instituto de Meio Ambiente de Mato Grosso do Sul / Imasul. Diretoria de Desenvolvimento. **Guia Orientativo ICMS Ecológico 2018**. Campo Grande, MS: 2018a.
- IMASUL. **Sistema Estadual de Informações em Educação Ambiental - SisEA/MS**. Campo Grande: IMASUL, 2020a. Disponível em: <http://www.imasul.ms.gov.br/educacao-ambiental/sistema-estadual-de-informacao-em-educacao-ambiental-SisEAmS/>. Acesso em: 2 jun. 2020.
- IMASUL. **Manual do usuário - Sistema Estadual de Informações em Educação Ambiental SisEA/MS**. Campo Grande: IMASUL, 2020b.
- JACOBI, P. R. Educação ambiental: o desafio da construção de um pensamento crítico, complexo e reflexivo. **Educação e Pesquisa**, São Paulo, v. 31, n. 2, p. 233-250, 2005.
- LAYRARGUES, P. P. Para onde vai a educação ambiental? O cenário político-ideológico da educação ambiental brasileira e os desafios de uma agenda política crítica contra-hegemônica. **Revista Contemporânea de Educação**. v. 7, n. 14, p. 398-421, 2012.
- LAYRARGUES, P. P. P. Manifesto por uma Educação Ambiental indisciplinada. **Ensino, Saude e Ambiente**, p. 44-88, 2020.
- LAYRARGUES, P. P.; LIMA, G. F. da C. As macro-tendências político-pedagógicas da educação ambiental brasileira. **Ambiente & Sociedade**, v. 17, p. 23-40, 2014.
- LIMA, G. C. Questão ambiental e Educação: contribuições para o debate. **Ambiente & Sociedade**. Ano 2, Nº 5, p. 135-153, 2º Semestre de 1999.
- LOUREIRO, C. F. B. Teoria social e questão ambiental: pressupostos para uma práxis crítica em educação ambiental. In: LOUREIRO, C. B. F.; LAYRARGUES, P. P.; CASTRO, R. S. de. (org.). **Sociedade e Meio Ambiente: a educação ambiental em debate**. 4. ed. São Paulo: Cortez, 2006, p. 13-51.
- LOUREIRO, C. F. B. **Educação Ambiental: questões de vida**. São Paulo: Cortez, 2019.
- LOUREIRO, C. F. B.; LAYRARGUES, P. P. Ecologia política, justiça e educação ambiental crítica: perspectivas de aliança contra-hegemônica. **Trabalho, educação e saúde**. Rio de Janeiro, v. 11, n. 1, 2013.
- LOUREIRO, C. F. B. e TORRES, J. R. (orgs.). **Educação ambiental: dialogando com Paulo Freire**. São Paulo: Cortez, 2014.

LUDKE, M.; ANDRÊ, M. E. D. I. (org.). **Pesquisa em educação: abordagens qualitativas**. São Paulo: E.PU, 2012.

MAMEDE, S. B., BENITES, M., SIQUEIRA, J. F. R., & JUNIOR, M. V. C. Educação Ambiental e os desafios para implementação de políticas públicas em Mato Grosso do Sul. **Revista Brasileira de Educação Ambiental (RevBEA)**, 16(1), 493-507. 2021.

MATO GROSSO DO SUL. **Lei n.º 5.287**, de 13 de dezembro de 2018. Dispõe sobre a Política Estadual de Educação Ambiental de Mato Grosso do Sul (PEEA/MS). Campo Grande: IMA-SUL, 2018. Disponível em: <http://www.imasul.ms.gov.br>. Acesso em: 20 jul. 2019.

MINAYO, M. C. de S. **Pesquisa social: teoria, método e criatividade**. 7. ed. Petrópolis: Vozes, 1997.

MINAYO, M. C. de S.; SANCHES, O. Quantitativo-qualitativo: oposição ou complementaridade?. **Cadernos de saúde pública**, v. 9, n. 3, p. 237-248, 1993.

MIRANDA, E. E. de; MARTINHO, P. R. R.; CARVALHO, C. A. de. **Dinâmica de queimadas e incêndios na bacia do rio Paraguai e no Pantanal (2018 e 2020)**. Campinas: Embrapa, 2021.

ORLANDI, E. P. **Análise de Discurso: princípios e procedimentos**. Campinas: Pontes, 1999.

PÊCHEUX, M. Análise automática do discurso (AAD-69). In: GADET, F.; HAK, H. **Por uma análise automática do discurso**. Uma introdução à obra de Michel Pêcheux. Campinas: Pontes, 1990. p. 61-162.

PINTO, V. P. S.; GUIMARÃES, M. A educação ambiental no contexto escolar: temas ambientais locais como temas geradores diante das questões socioambientais controversas. **Revista de Geografia-PPGEO-UFJF**, v. 7, n. 2, 2017.

PIMENTEL, A. O método da análise documental: seu uso numa pesquisa historiográfica. **Cadernos de Pesquisa**, São Paulo, n. 114, p. 179-195, 2001.

QUINTAS, J.S. Educação no processo de gestão ambiental pública: a construção do ato pedagógico. In: LOUREIRO, C.F.B.; LAYRARGUES, PP; CASTRO, R.S. de. **Repensar a educação ambiental um olhar crítico**. São Paulo: Cortez, p. 33-79, 2009.

RODRIGUES, J. N.; GUIMARÃES, M. Algumas Contribuições Marxistas à Educação Ambiental (EA) Crítico-Transformadora. **Revista de Educação Publica (UFMT)**, v. 20, p. 501-518, 2011.

REIGOTA, M. **O que é educação ambiental**. Brasiliense, 2017.

SAUVÉ, L. Uma cartografia das correntes em Educação Ambiental. In: SATO, M.; CARVALHO, I. C. M. (org.). **Educação ambiental: pesquisa e desafios**. Porto Alegre: Artmed, 2005. p. 17-44.

SEMADE. **Estudo da dimensão territorial do estado de Mato Grosso do Sul: regiões de plane-**

jamento. Campo Grande: SEMADE, 2015.

TEIXEIRA, L. A.; TALAMONI, J. L. B. Educação ambiental e formação docente: a prática educativa ambiental como objeto de reflexão histórico-crítica. *In: Educação Ambiental a várias mãos: educação escolar, currículo e políticas públicas*, p. 41-58, 2014.

TOZONI-REIS, M. F. de C. Temas ambientais como ‘temas geradores’: contribuições para uma metodologia educativa ambiental crítica, transformadora e emancipatória. **Educar**, Curitiba, n. 27, p. 93-110, 2006.

TOZONI-REIS, M. F. C. Contribuições para uma pedagogia crítica na educação ambiental: reflexões teóricas. *In: LOUREIRO, C. F. B. A questão ambiental no pensamento crítico: natureza, trabalho e educação*. Rio de Janeiro: Quartet, 2007. p. 177-221.

TOZONI-REIS, M. F. DE C.; MAIA, J. S. DA S. **Educação ambiental a várias mãos: educação escolar, currículo e políticas públicas**. Junqueira&Marin Editores, 2014.

Maria Rita Mendonça Vieira

✉ mariarmvieira@hotmail.com

ORCID: <https://orcid.org/0000-0002-3130-0052>

Submitted on: 02/03/2021

Accepted on: 20/11/2022

2023;26:e01722

Angela Maria Zanon

✉ zanon.ufms@gmail.com

ORCID: <https://orcid.org/0000-0003-3346-0604>

Tendências e concepções de educação ambiental das ações cadastradas no SisEA/MS e realizadas em Ladário/MS

Maria Rita Mendonça Vieira
Angela Maria Zanon

Resumo: Esta investigação busca analisar as concepções de Educação Ambiental (EA) nas propostas cadastradas no Sistema Estadual de Informação em Educação Ambiental de Mato Grosso do Sul (SisEA/MS), realizadas no município de Ladário, Estado de Mato Grosso do Sul, Brasil. A pesquisa de abordagem quanti-qualitativa trata da análise documental de 27 propostas. O caráter quantitativo envolveu a avaliação dos indicadores: situação das propostas, tipo de ação, temáticas e público-alvo. A abordagem qualitativa se deu pela Análise do Discurso (AD), evidenciando as concepções em EA. A vertente conservadora foi predominante nas ações, com vista a uma mudança comportamental do indivíduo, desconsiderando a dimensão sócio-política. As inferências trazidas aqui mostram caminhos para a superação de práticas que seguem tendências conservadoras da EA, na busca de práticas que busquem a transformação da realidade. É preciso (re) pensar os procedimentos metodológicos das ações, considerando os fundamentos teóricos, temas e público-alvo para uma EA crítica e transformadora.

São Paulo. Vol. 26, 2023

Artigo Original

Palavras-chave: Educação Ambiental Crítica; Educação Ambiental Conservadora; Análise do Discurso; concepções; Mato Grosso do Sul.

Tendencias y conceptos de acciones en educación ambiental registradas en SisEA/MS y realizadas en Ladário/MS

Maria Rita Mendonça Vieira
Angela Maria Zanon

Resumen: Esta investigación busca analizar los conceptos de Educación Ambiental (EA) en las propuestas registradas en el Sistema Estatal de Información sobre Educación Ambiental de Mato Grosso do Sul (SisEA/MS), realizadas en el municipio de Ladário, Estado de Mato Grosso do Sul, Brasil. La investigación con enfoque cuantitativo-cualitativo trata del análisis documental de 27 propuestas. El carácter cuantitativo implicó la evaluación de indicadores: estado de las propuestas, tipo de acción, temas y público objetivo. El abordaje cualitativo estuvo dado por el Análisis del Discurso (AD), evidenciando las concepciones en EE. Predominó el aspecto conservador en las acciones, con miras a un cambio de comportamiento del individuo, sin tener en cuenta la dimensión sociopolítica. Las inferencias aquí traídas muestran formas de superar prácticas que siguen tendencias conservadoras en EA, en la búsqueda de prácticas que buscan transformar la realidad. Es necesario (re)pensar los procedimientos metodológicos de las acciones, considerando los fundamentos teóricos, los temas y el público objetivo para una EA crítica y transformadora.

São Paulo. Vol. 26, 2023

Artículo Original

Palabras-clave: Educación Ambiental Crítica; Educación ambiental conservadora; Análisis del habla; Concepciones; Mato Grosso do Sul.