

Environmental Education Practices in the Municipality of Aracaju in Times of the Covid-19 Pandemic: Barriers and Opportunities

Práticas de Educação Ambiental em el Municipio de Aracaju en Tiempos de la Pandemia del Covid-19: Barreras y Oportunidades

Práticas de Educação Ambiental no Município de Aracaju em Tempos de Pandemia de Covid-19: Entraves e Oportunidades

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ABSTRACT: The study aims to reflect on the obstacles and opportunities for environmental education actions in the municipality of Aracaju-Se during the Coronavirus (Covid-19) pandemic. Thus, a bibliographic research with a quali-quantitative method was carried out, applying the information obtained to the technique of content analysis, by Laurence Bardin. The study also promoted a survey of the actions carried out by the Municipal Secretariat for the Environment (SEMA) of the required municipality, during the pandemic through the disclosure on the official website of the Municipality of Aracaju (PMA). With the data obtained, it was found that the need for social isolation during the pandemic created an obstacle for carrying out the environmental education actions planned for the year 2020 by SEMA AJU. However, it can also be seen that during the aforementioned isolation, families started to take a more active role in the education of their children, which indicates an opportunity to involve the family with interdisciplinary strategies to promote environmental education.

ENVIRONMENTAL EDUCATION. FAMILY. INTERDISCIPLINARITY. SOCIAL ISOLATION.

RESUMEN: El estudio tiene como objetivo reflexionar sobre los obstáculos y oportunidades para las acciones de educación ambiental en el municipio de Aracaju-Se durante la pandemia del Coronavirus (Covid-19). Así, se realizó una investigación bibliográfica con un método cuali-cuantitativo, aplicando la información obtenida a la técnica de análisis de contenido, de Laurence Bardin. El estudio también promovió el relevamiento de las acciones realizadas por la Secretaría Municipal de Ambiente (SEMA) del municipio requerido, durante la pandemia a través de la divulgación en el sitio web oficial del Municipio de Aracaju (PMA). Con los datos obtenidos, se encontró que la necesidad de aislamiento social durante la pandemia creó un obstáculo para la realización de las acciones de educación ambiental previstas para el año 2020 por SEMA AJU. Sin embargo, también se puede observar que durante el aislamiento antes mencionado, las familias comenzaron a jugar un rol más activo en la educación de sus hijos, lo que indica una oportunidad para involucrar a la familia con estrategias interdisciplinarias para promover la educación ambiental.

EDUCACIÓN AMBIENTAL. FAMILIA. INTERDISCIPLINARIDAD. AISLAMIENTO SOCIAL.

RESUMO: O estudo tem por objetivo refletir acerca dos entraves e oportunidades para as ações de educação ambiental no município de Aracaju-Se durante a pandemia do Coronavírus (Covid-19). Realizou-se assim, uma pesquisa bibliográfica com método quali-quantitativo, aplicando as informações obtidas à técnica da análise de conteúdo, de Laurence Bardin. O estudo também promoveu o levantamento das ações realizadas pela Secretaria Municipal do Meio Ambiente (SEMA) do requerido município, durante a pandemia por meio da divulgação no site oficial da Prefeitura Municipal de Aracaju (PMA). Com os dados obtidos verificou-se que a necessidade de isolamento social durante a pandemia criou entrave para realização das ações de educação ambiental planejadas para o ano de 2020 pela SEMA AJU. Contudo, também se pode constatar que durante o mencionado isolamento as famílias passaram a ter um papel mais ativo na educação dos filhos, isso indica uma oportunidade de envolver a família com estratégias interdisciplinares de promoção à educação ambiental.

EDUCAÇÃO AMBIENTAL. FAMÍLIA. INTERDISCIPLINARIDADE. ISOLAMENTO SOCIAL.

Introduction

The World Health Organization (WHO) announced at the beginning of 2020 a new pandemic in the world, the Coronavirus (Covid-19). To bring to light the legal definition of the new Coronavirus at the international level, they resorted to the public health emergency declaration of global relevance issued by the WHO on January 30th, 2020. The document defines Covid-19 as a virus that causes acute respiratory infections. Nowadays, its name associates with the Covid-19 pandemic (a disease caused by a new species of Coronavirus) SARS-CoV-2. The pandemic status does not relate to the number of people infected. It relates to the worldwide reach of the virus. At the national level, the Brazilian Ministry of Health, through Ordinance MS No. 188, of February 3rd, 2020, ratifies the “Public Health Emergency” of national importance because of the new Coronavirus (2019-nCoV) to develop strategies to contain the contamination, giving the possibility for the treatment and diagnosis of Covid-19.

Regarding the initial reflexes of the pandemic in the municipality of Aracaju, state of Sergipe, Brazil, Decree 6,094, of March 16th, 2020, stands out, which presents measures to deal with the public health emergency of international importance, arising from the human infection by the new Coronavirus and provides for the related actions.

Our general objective is to debate the barriers and opportunities for environmental education practices in the capital of Sergipe, Brazil, during the Covid-19 pandemic. Within this perspective, the following question arose: What are the barriers and opportunities for environmental education practices in Aracaju in times of Covid-19 pandemic? We carried out bibliographic research on scientific articles, books, and other research works based on the qualitative method and content analysis by Laurence Bardin to enhance the results and to answer the proposed question. At the same time, we also performed a survey to investigate actions developed by the Municipal Secretariat for the Environment of Aracaju (Sema in Portuguese). We compared the period during the Covid-19 pandemic and the same period in 2019.

We considered the same period in the investigation to perform a comparative study of the actions carried out. However, before doing the comparative analysis of the results obtained, we brought a general overview of the doctrinal contribution that involves topics such as reflections of the Covid-19 pandemic. We also addressed the interdisciplinary process of environmental education in times of pandemic; environmental education and its democratization in times of crisis; socio-environmental public policies, management, and environmental planning; the methodology used; results obtained, and final considerations.

To promote the proper cut in this study, we considered the environmental policies as influential directly or indirectly in the environmental education promotion. Law No. 9,795 on April 27th, 1999 instituted the National Environmental Education Policy to meet the interests of

environmental education. Within the scope of Aracaju, the Municipal Environmental Education Policy (Law No. 3,309/2005) was published to regulate the municipal policy. It is important to note that on February 8th, 2013, through Law No. 4,359, the Municipal Secretariat for the Environment (Sema) was created to promote environmental management in Aracaju. For this reason, in this research, we considered the actions published on the **website** of the Municipality of Aracaju (PMA in Portuguese) attributed to the SEMA. To coordinate environmental education actions, Sema AJU inserted the Environmental Education Coordination in its organizational chart.

It is common sense that, in Brazil, despite the normative framework that seeks to protect the environment, there is still a glaring disregard for environmental standards without due accountability. In Aracaju, the reality is no different. Therefore, it is urgent to promote effective actions for environmental education by environmental agencies. With these actions, the search for an increase in the number of partners for inspection and environmental awareness may collaborate in reducing the violations to the environment. Even during a pandemic, one cannot fail to promote public policies that contemplate the relationship between humans and nature.

As a result, we found that the need for social isolation due to the Coronavirus caused a significant reduction in the number of environmental education actions carried out by Sema, especially without promoting the “Environment Week” which is a traditional event promoted by Sema. It is noteworthy that the number of environmental education actions carried out has been decreasing, but during the pandemic, this reduction was more significant. Despite the obstacles, we verified the promotion of environmental education during the pandemic period, which are opportunities to promote these environmental awareness actions with the families.

1 Environmental Education Practices in Times of the Covid-19 Pandemic

1.1. *Implications of the Coronavirus pandemic*

Undoubtedly, the pandemic evolution of Covid-19 brought several changes in various social sectors **a priori** considered temporary measures. Then they became definitive due to the temporal expansion that occurred by the spread of the pandemic. As a result, it emerged some essential demands of society such as replacing presential activities with the domiciliary ones (the home office mode), orders via delivery, online classes, and other significant changes (Moreira, 2020).

In this context, Cruz (2020) brings the principle of human dignity that enters the current scenario with a noble objective: ensuring the minimum necessary for human existence. Such assurance is directed, mainly, to people in need, bringing ways of eating, buying medicine, protection against the spread of the virus, and even guaranteeing the minimum possible personal hygiene, without neglecting the environmental protection for present and future generations, and all that through social benefits.

However, besides these changes, the unemployment rate in Brazil and the world skyrocketed. There was also paralysis of some public bodies and municipalities to provide essential services for some groups, such as social security, educational activities, environmental services, etc. (Moreira, 2020).

According to Cruz (2020), the Coronavirus pandemic caused a global change due to the health crisis that the virus caused worldwide. That created grave problems in the most diverse sectors of the globalized world. The biggest concern in the world sphere was (or at least it should be) the protection of human beings' lives. For example, in countries such as Brazil, the pandemic has spread due to internal political conflicts, generating institutional instability and impacts on the academic, scientific, and legal world. It is noteworthy that the Brazilian Supreme Federal Court ensured federal states and municipalities with autonomy in decisions about facing Covid-19.

In this perspective, the federated entities started to promote public policies of digital inclusion with higher priority. In this perspective, federal universities and institutes have provided digital inclusion notices. They provide **Internet access chips** and subsidies to buy electronic equipment for students who live in places without Internet access or appropriate electronic devices to follow online classes (Moreira, 2020). The expansion of remote education by federated entities appears as a possibility to promote the interdisciplinary process of environmental education in times of pandemic, as will be exposed below.

1.2 Promoting environmental education in times of pandemic

In today's society, the recurrence of discussions about society-nature relations and sustainability has intensified. Within this perspective and given the scenario of the covid-19 pandemic, the proposed study extends the debate about the use of viable interdisciplinary education strategies to increase the number of partners in promoting environmental awareness. Thus, the need for encouraging family educational practices supported by the democratization of environmental education in formal, non-formal, and informal spaces is pertinent.

According to Araújo (2019), we should understand the application of environmental education as an instrument of governance that is eager to raise environmental issues by encouraging popular participation and strengthening the feeling of belonging. The emergence of this type of education is to work as an interdisciplinary tool that promotes awareness about the importance of the environment to people's lives.

In this perspective, it emerges as an interdisciplinary strategy for the democratization of environmental education. According to Philippi Jr. *et al.* (2000), nowadays, more in-depth interdisciplinary resources should be sought and supported by their theoretical and methodological contribution, directed to the management and appropriation of environmental resources. The interconnection between the various areas of knowledge is essential to consolidate the process of environmental education.

The debate on these interconnections in the 21st century requires philosophical and complex thought. According to Silva *et al.* (2018), the socio-environmental perspective is guided by complex and interdisciplinary rationality, by viewing the environment not as a synonym for nature, but as a conducive space for interactions between culture, society, and the mechanics of nature, within a process of dynamic interaction.

In Santana's view (2017), the conception we currently have about the environment is different from the one we had in the past. At the same time, environmental law has evolved. That emphasizes the need for new environmental awareness practices. By resorting to philosophical thinking, we intend to relate environmental democracy to online education as an interdisciplinary strategy for environmental education in times of covid-19 pandemic. Therefore, the current scenario favors today's reflections about new interdisciplinary strategies to promote environmental awareness with family involvement.

It is paramount to promote an expansion in the debate about the human-nature relationship in the quest to promote sustainability, which according to Flores (2012), reflects the ability to meet the demands from the present without compromising the possibilities of future generations.

This reflection makes it possible to think of a way of education that transcends the disciplinary contents aimed at life training. Thus, we consider that, in addition to formal environmental education trained in schools, environmental democratization may be present in informal spaces such as home education.

1.3 Democratization of environmental education in times of crisis

When addressing the theme of Environmental Education, Araújo (2019, p. 11) emphasizes that it is the constant search “[...], of the individual (man) and the collective (society) aiming at the solution of environmental problems, raising information and evaluating the construction of a critical and realistic conviction with civil society organized following sustainability”.

Along the same lines, Baganha et al. (2018) teach that Environmental Education is committed to a new reality in which there is, “[...] the transition to sustainable schools and societies must contribute to animate and strengthen each person in their commitment with the maintenance of life and the construction of a better world, for humans and other beings with whom we share the planet”.

According to Mitra (2017, p. 269) “when we regulate our environment, we are molding it according to a certain vision. [...]. Due to regulation, it is also possible to privilege some views on others, and their burden, to disproportionately affect some inhabitants on others”. It follows from the above that, in the definition of the rules that regulate our environment, there is an imposition of some people on others.

It is noteworthy that the expansion of the population's environmental awareness directly reflects the essence of “Environmental Democracy”. According to Paiva (2018, p. 266) “[...] it allows the individual to exercise their freedom to the environment qualified, actively participating in its protection, and when necessary, help the Judiciary to obtain the necessary protection, [...]”.

The referred democratization is demonstrated in the engagement of the municipal public power effectively in the defense of the environment. According to Souza *et al.* (2016, p. 7) “[...] cities do not stop growing, and often, or almost always, they do so without the necessary care in terms of spatial planning and management”. The growth of cities puts the right to an ecologically balanced environment at risk.

It should be noted that, among the various urban problems of contemporary society, the democratization of environmental education has considerable prominence, as it focuses on issues involving health, well-being, environmental balance, among others that put lives at risk. The cases involving these problems in the cities, including the initiatives on how to solve the referred problem are of relevant interest to the people who live in urban centers.

We cannot deny that, in the middle of the 21st century, it is essential to expand the discussions about the importance of complying with the “Sustainable Development Goals (SDGs)”. Among the SDGs, there is the provision on the need to guarantee a healthy life and manage well-being for all, at all ages. When the government does not broadly promote environmental education, it does not even make it possible for parents and their children to know about the existence of the SDGs.

The importance of the family in the educational formation of children is notorious. On the subject, art. 205 of the Federal Constitution of 1988 (CF/1988 in Portuguese): “Education, the right of all and the duty of the State and the family, will be promoted and encouraged with the collaboration of society, aiming at the full development of the person, their preparation for the exercise of citizenship and their qualification to work” (BRASIL, 1988).

CF/1988 recommends that everyone should contribute to education and that the family is considered a favorable environment for environmental training. However, family education cannot substitute school education. It should act as a complement, ethical and joint participation of parents in the education of their children.

Regarding the socialization of environmental education, Paiva (2018) emphasizes that consolidating environmental democracy is to encourage sustainable development, as, in this scenario, environmental education will enable broader access to legal instruments to protect the environment. Therefore, this study intends to awaken to the importance of training parents to be multipliers of respect for the environment within their homes, as much of what their children learn was within family life.

In the 90s of the last century, Freire (1996) already warned of the need for an “Environmental Dialogical Education” in which individuals are predisposed to learn and thereby allow a dialogical relationship that engenders restlessness and curiosity. In this context, a democratic dialogue emerges

as the main element to promote parents' environmental education, which enables them to multiply the environmental education of their families in their homes.

In the conception of Paiva (2018), education, as well as the environment, fundamental human rights, are shown as tools for the adoption of a conscious posture that generates responsibilities. This is the reason why education and citizenship are considered stages.

1.4 Socio-environmental public policies, management, and environmental planning

Undoubtedly, it is necessary to adopt public socioenvironmental policies to be effective in the right to an ecologically balanced environment. Among them, environmental education stands out, seeking to increase the number of partners defending the environment. In this context, Santana (2017, p. 90) warns that “[...] it is only through knowledge about the advantages of having an adequate and healthy environment that people look for alternatives to implement such an intention”.

As seen, environmental education is one of the social and environmental public policies aimed at guaranteeing social support for environmental management actions. Within this perspective and aiming at environmental democratization, art. 225 of the 1988 Federal Constitution states that: “Everyone has the right to an ecologically balanced environment, a common use of the people essential to a healthy quality of life, imposing on the Public Power and the community the duty to defend and preserve it for present and future generations”. Undoubtedly, environmental planning and management have assumed dimensions of essential activities for the promotion of environmental quality. According to Rodriguez and Silva (2016), environmental planning and management instruments are indispensable tools to develop an environmental policy.

For these policies to succeed, the engagement of the community is essential. Soares (2015) points out that participatory management is the management that has the community's participation and can be understood as the management model with a focus on the process in which each group is responsible for its actions. The democratization of access to environmental practices is an important tool for raising public awareness of the need to promote environmental balance.

Within this debate, Fiorillo and Ferreira (2015, p. 122) mention that “In the fundamental right to the environment, it is necessary to question the extent to which the strategies put into action for sustainability are not just a way of capitalizing on nature”, where individual decisions end up prevailing over the collective interest. These decisions may compromise the environmental balance.

At the same line, Santos and Guimarães (2010) say that bringing together individual and collective interests is one of the great challenges of the State. With environmental democracy, the objective is to involve society more in the environmental management process.

According to Dal Forno (2017), the environmental management process involves the planning carried out to manage people. Planning is the instrument to define how the referred process will occur considering the environmental conditions.

According to Carvalho and Mendonça (2018, p. 57) “[...], the socio-environmental conditions that surround the individual reality, and the community in which he or she participate gain importance, since it interferes with the time in which they can be determinants in the proliferation and/or prevalence of diseases in the environment”. These conditions directly interfere in the promotion of sustainability.

Oliveira et al. (2017) point out that to deal with sustainable development is to consider the indispensability and interconnection of the economic and social dimensions inserted in the search for quality of life for the individual and by the individual, in the context of life in society.

The idea of democratizing environmental education is defended as a cooperative instrument to solve the environmental problems of modernity. The pandemic has shown how the importance of the family in the education of children has never been seen. Besides, after Covid-19, that may contribute to the proposition of projects that involve the participation of parents in environmental education events so that they can be multipliers in the family.

2 Methodology

Regarding the delimitation of the area of study, we proposed to investigate the capital of Sergipe. As stated, Aracaju is located on the coast of Sergipe, extending parallel and longitudinally to the Atlantic Ocean with the following geographical coordinates: longitude 37° 04' 18" W and latitude 10° 54 '40" S. It belongs to the Atlantic Forest biome and has a sub-humid climate.

The delimitation and characterization of the area of study contribute to the perception of the studied space. Thus, in the conception of Santos and Silva (2015), space is the object of study through which social, cultural, and natural conceptions are examined. The human being has a very important role in the construction of this object. As the authors cite, space is a fundamental element that influences the interpretation of other factors added to it.

It is also noteworthy that the choice for Aracaju, among other factors, occurred because it was the last capital of the country to create an environmental agency, because it received the title of capital of quality of life in 2008 and, due to the environmental fragility of the area in which this city is. Site selection, as explained, involved this set of factors. During the pandemic, with the rationalization of public services, including environmental inspection, environmental education gains greater relevance.

We applied the content analysis technique to the information collected in the research works and obtained on the PMA website about the actions carried out by SEMA from March 12th to December 12th, 2019 and, in the same period of 2020. According to Bardin (2011) content analysis is a set of communication analysis techniques, which uses systematic and objective procedures. To apply the content analysis, we categorized the information on the environmental education actions collected in the aforementioned period and, subsequently, led to inferences about the impacts of the pandemic on the institutions' actions.

The present study has a qualitative and quantitative character, with emphasis on the qualitative approach, which found substrate in the information collected on the official website of the PMA and in the doctrine that deals with the researched topic. The quantitative approach, on the other hand, focused on verifying the number of environmental practices carried out by SEMA in the period studied in this investigation.

3 Results and Discussion

The investigation used a survey of the practices developed by SEMA during the Covid-19 pandemic. As was seen throughout the topics, dealing with environmental education actions is of interest to all of society. In this context, how these actions were carried out in Aracaju by the municipal government is of great relevance to the local population. Within this perspective, the main expected result from the data collected was to comply with the general objective of the research, which is to debate about the barriers and opportunities for environmental education practices in Aracaju during the Covid-19 pandemic.

In this study, there is no intention to exhaust the topic addressed. However, we intended to outline an overview of the limitations and possibilities of environmental education practices in times of pandemic, aiming to alert public managers and society in general about how these practices have been managed and, therefore, they can serve as a study to promote actions to improve environmental education in Aracaju. Through the analysis proposed with the present study, the municipal government and organized civil society can encourage actions that have been developed and/or implemented.

According to the data collected on the PMA website, we verified the actions developed from 03/12/2019 to 12/12/2019. The first action released was on May 31st, 2019, when PMA promoted Environment Week with actions aimed at environmental education for free and open to the public.

On July 11th, 2019, Aracaju reinforces the preventive maintenance of newly planted urban trees. On July 30th, a campaign begins in which the support of Aracaju's population is requested in the identification of land suitable for the proliferation of *Aedes aegypti*.

In August 2019, two social and environmental policies promoted by SEMA were launched, the first of which refers to the Aracaju Mais Verde Program developed in the Jabotiana neighborhood. The second action refers to the action of "Plante com a Gente" in the Aruana neighborhood. And the third environmental practice held on August 30th, 2019 aimed at presenting the environmental inspection procedures carried out by the PMA to students of Ecology and Biological Sciences at the Federal University of Sergipe (UFS in Portuguese).

In September 2019, the Aracaju Mais Verde Project was carried out, where the city government plants 50 seedlings of ipê trees in the Augusto Franco neighborhood, located in Aracaju. On September 13th, PMA participated in the construction of national guidelines for the management of urban green areas.

In October, Aracaju discloses the participation of SEMA in the seminar on water resources promoted by the Federal University of Sergipe (UFS) and the visit made by the Secretary of Environment in the new headquarters for monitoring oil stains in Brasília.

The penultimate action of SEMA disclosed within the analyzed period took place in November with the participation of SEMA in the II construction workshop of the Urban Green Areas program in Brasília. On December 5th, 2019, the last action that referred to environmental education practices to raise public awareness took place.

As noted in the information released in the period from 03/12/2019 to 12/12/2019, that is, in nine months, there were twelve SEMA's actions in Aracaju. Among them, it is noteworthy that the first deals with the traditional Environment Week with actions aimed at environmental education that took place free of charge and open to everybody.

Regarding the actions developed from March 12th to December 12th, 2020, we found that the first environmental practice disclosed occurred on March 13th, 2020 with the first meeting of the year with a global alliance of sustainable cities that took place in person, as the municipal decree with the adoption of sanitary measures to confront Covid-19 in Aracaju had not yet been published.

Still, about the year 2020, the second environmental practice developed and disseminated by SEMA occurred after the municipal decree resulting from the confrontation of the Coronavirus. In this action, dated March 26th, 2020, it is disclosed that the services of the Secretariat of the Environment could also be performed on the **internet**. Also, concerning the change in SEMA's service, on April 7th, 2020, it is disclosed on the PMA website that the **online** environmental licensing service was guaranteeing agility and sustainability.

On May 6th, 2020, it is announced that the adoption of good practices guarantees to Aracaju another seal from the Environmental Agenda of Public Administration (A3P). The other environmental practice published on the PMA **website** only occurred on August 10th, 2020, through which SEMA continues the actions of compensatory planting in several avenues. The last action published within the investigated period took place on December 1st of that year when it was published that SEMA carried out more than a thousand inspections during the pandemic.

In the period between March 12th and December 12th, 2020, six SEMA shares were identified in Aracaju, that is, half of what had been carried out in the same period of the previous year. However, in the actions disclosed, there is none directly related to environmental education. Regarding the pandemic, this finding is worrying, since, despite the limitations imposed by the need for social isolation, there are other possibilities for holding events and actions to raise environmental awareness.

To understand the main obstacles and opportunities for the promotion of environmental education actions in Aracaju in times of Coronavirus, a categorization was carried out through the content analysis of Bardin (2011) to draw a general panorama. The research shows the obstacle of promoting face-to-face events aimed at promoting environmental awareness. As well as there was a difficulty in identifying and inspecting the places of recurring irregular discharges of solid waste that are environmental and public health problems, for example, masks, containers for storing hand sanitizer, among other wastes.

Another obstacle that deserves mentioning refers to the implementation of actions that aim to curb the practices of noise pollution and disturbance of peace in Aracaju, which increased with social isolation. Just as there were difficulties to maintain the selective collection service with the same frequency in time of the pandemic.

The mobilization of the community of students and the general population to participate in events in which environmental preservation is stimulated was also hampered, as there was no planning for remote events that suited the reality of the new normal. With the advent of the pandemic, there was also a loss in the preventive maintenance of newly planted urban trees.

Regarding opportunities to promote environmental education actions during the pandemic, the possibility of promoting remote training of SEMA civil servants who work with environmental education actions during the pandemic was initially verified. With the reduction of demands in Covid-19 times, the opportunity arises to intensify the computerization of the secretariat, to manage processes by establishing partnerships, and seeking sources of financing to develop its environmental awareness activities.

The social isolation of families also arises as an opportunity to involve parents and children in joint environmental education practices, for example, holding events remotely involving the family and seeking to promote environmental awareness. With this, it is possible to structure SEMA to meet the demands for environmental education in the “new normal”.

In addition to carrying out remote educational activities aimed at promoting environmental education, the support of the media and the population is of fundamental importance for the process of identifying and inspecting the locations where there are addicted points for irregular waste disposal and new disposal points that may arise during the Covid-19 pandemic.

Intensification of inspections and maintaining on-call teams with the support of partners to deal with complaints regarding noise pollution and disturbance of peace in Aracaju is another possibility that arises with the pandemic, as with the social isolation it was noticed with the research one increase in the number of claims resulting from the referred denunciations. With the Coronavirus, the possibility arose to explore environmental awareness playfully, through virtual presentations of SEMA's Environmental Theater, aiming to promote the continuity of environmental awareness actions.

To illustrate, with the study the main results obtained after research on the official page of the PMA were exposed. Among the obstacles, we highlight those that deal with the following practices: difficulty in promoting events, identifying, and inspecting the places of recurrent irregular discharges of solid waste, curbing noise pollution practices and disturbance of peace, promoting environmental awareness in a ludic way, among others during the Coronavirus pandemic.

Regarding opportunities, the realization of remote educational activities aimed at promoting environmental education stands out, triggering awareness actions to count on the support of the media and the population during the process of identification and inspection of the referred locations where they have hooked points of irregular waste disposal and new disposal points that may arise during the Covid-19 pandemic. In addition to these opportunities, it is necessary to sensitize the population about the relevance of selective collection so that the community feels motivated to participate since with social isolation there is a tendency to increase the production of household waste, including waste arising from care in coping with Covid-19. However, it is necessary to create infrastructure throughout the city to collect such material.

Despite the pandemic, the need to promote environmental education cannot be ignored, to show the importance of combining economic development with the environment. Development must take place without compromising the right to a healthy environment, as this is also considered a human right. Timo (2017, p. 207) “To conceive the development from a human rights perspective means to overcome this present paradox. [...]. Basic principles, such as participation and non-discrimination, provide information, and guide decision-making”.

For example, one of the alternatives for promoting environmental education in times of a pandemic would be to promote virtual presentations of SEMA's Environmental Theater, in an open channel such as YouTube, aiming to manage the continuity of environmental awareness actions. At

this time, when families have been participating more actively in the education of children, it would be an excellent opportunity to involve parents in promoting environmental awareness with their children.

Final Considerations

With the study, we could debate doctrinally about the relationship between education and environmental democracy as interdisciplinary environmental education strategies developing in formal and informal environments aiming to awaken the feeling of belonging to the environment.

The research carried out has significant social, environmental, and academic relevance since it is no longer conceivable to fail to diagnose the problem of the continuity of environmental education actions, as well as the omission of the municipal public power and organized civil society, before the of everything that has already been presented. For this reason, interdisciplinary education and environmental democracy strategies were used to expand and continue awareness-raising activities, even in times of pandemic. Hence, it comes the need to reflect on the barriers and opportunities for environmental education. The results obtained showed that the need for social isolation during the pandemic caused a reduction in the number of environmental education actions carried out by SEMA.

Unquestionably, the referred pandemic caused several changes in public policies, highlighting those of environmental education. In this context, we aimed to discuss the obstacles and opportunities for environmental education practices in Aracaju during the Covid-19 pandemic.

Among the obstacles mentioned, we highlighted the difficulty of promoting events, identifying, and inspecting the places of recurrent irregular discharges of solid waste, curbing noise pollution practices and disturbing quiet, promoting environmental awareness playfully, among others during the new Coronavirus pandemic.

Regarding opportunities, the highlight is the carrying out of remote educational activities aimed at promoting environmental education, triggering awareness-raising actions to count on the support of the media and the population during the process of identifying and inspecting the locations where they have points of irregular waste disposal and new disposal points that may appear during this pandemic. With social isolation, several socio-environmental policies were affected. However, despite the difficulties imposed on the municipal public power, it is up to them to seek to outline interdisciplinary environmental governance strategies to maintain human-nature relations.

Undoubtedly, environmental democracy emerges as an efficient strategy to teach the difference between right and wrong in the human-nature relationship, that is, it is an alternative to socialize environmental practices. Even in times of pandemic, local governments cannot ignore the lack of environmental awareness. In this line, the present research sought to understand the socio-environmental pressure exerted by the scarcity of environmental education practices and the answers that have been given to this problem. As a result, even after the Covid-19 pandemic, the home environmental education process for children can continue with the more active participation of parents.

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