



Paths Followed With Environmental Education In The Paulo Freire Chairs, Center and Institute In Brazil: Analyzing The Leaders' Conceptions

*Caminhos Trilhados Com A Educação Ambiental Nas Cátedras, Centro e
Instituto Paulo Freire no Brasil: Analisando as Concepções dos
Dirigentes*

*Caminos Seguidos Com Educación Ambiental Em Las Cátedras, El
Centro Y El Instituto Paulo Freire En Brasil: Analizando Las
Concepciones De Los Líderes*

MARCOS PAULO DA SILVA SANTANA¹, RAYANNE FERNANDA DA COSTA
MELO², MONICA LOPES FOLENA ARAÚJO³

¹ Universidade Federal Rural de Pernambuco – UFRPE

² Universidade Federal Rural de Pernambuco – UFRPE

³ Universidade Federal Rural de Pernambuco – UFRPE

ABSTRACT: *Environmental Education (EE) can be considered a dimension for individualst o develop sustainable skills and attitudes through critical awareness. In view of the approach of EE with Freire's thoughts and methodology, it is important to investigate the influence of Paulo Freire for works with this theme. In this way, the objective of this work is to understand the conceptions of the leaders of Freirian institutions about EE in these formative spaces. We used the interview as a data collection instrument. The interviews were audio recorded and transcribed. Data analysis was performed in the light of content analysis (BARDIN, 1994). The results found allow us to infer that in the directors' conception, EE is directly related to Freire's ideas, and there are several actions developed with EA in these spaces.*

ENVIRONMENTAL EDUCATION. FORMATIVE SPACES. PAULO FREIRE. FREIRE'S PEDAGOGY. SUSTAINABILITY.

RESUMO: *A Educação Ambiental (EA) pode ser considerada uma dimensão para que os indivíduos desenvolvam habilidades e atitudes sustentáveis através de uma consciência crítica. Tendo em vista a aproximação da EA com os pensamentos e a metodologia freireana torna-se importante investigar a influência de Paulo Freire para trabalhos com essa temática. Desse modo, o objetivo deste trabalho é compreender as concepções dos dirigentes de instituições freireanas sobre a EA nestes espaços formativos. Recorremos à entrevista como instrumento de coleta de dados. As entrevistas foram gravadas em áudio e transcritas. A análise dos dados foi feita à luz da*

Os autores cedem à Revista Internacional Educon os direitos de primeira publicação do presente artigo. Aplicam-se os termos de uma licença Creative Commons Atribuição 4.0 Internacional (CC BY 4.0), que permite o uso irrestrito, a distribuição e a reprodução em qualquer meio desde que a publicação original seja corretamente citada.

análise de conteúdo (BARDIN, 1994). Os resultados encontrados nos permitem inferir que, na concepção dos dirigentes, a EA se relaciona diretamente com as ideias de Freire e são várias as ações desenvolvidas com EA nestes espaços.

EDUCAÇÃO AMBIENTAL. ESPAÇOS FORMATIVOS. PAULO FREIRE. PEDAGOGIA FREIREANA. SUSTENTABILIDADE.

RESUMEN: *La Educación Ambiental (EA) puede considerarse una dimensión para que las personas desarrollen habilidades y actitudes sostenibles a través de la conciencia crítica. En vista de La aproximación de EA com los pensamientos y La metodología de Freire, es importante investigar La influencia de Paulo Freire para los trabajos con este tema. De esta manera, el objetivo de este trabajo es comprender las concepciones de los líderes de las instituciones freirianas sobre la EA em estos espacios formativos. Utilizamos la entrevista como instrumento de recolección de datos. Las entrevistas fueron grabadas en audio y transcritas. El análisis de datos se realizó a la luz de Lanálisis de contenido (BARDIN, 1994). Los resultados encontrados nos permiten inferir que, em la concepción de los directores, EA está directamente relacionada com las ideas de Freire, y hay varias acciones desarrolladas con EA en estos espacios.*

EDUCACIÓN AMBIENTAL. ESPACIOS FORMATIVOS. PAULO FREIRE. PEDAGOGÍA DE FREIRE. SUSTENTABILIDAD.

Introduction

The Constitution of the Republic of Brazil in Article 225, affirms as an inherent right to man an “ecologically balanced environment”, as we can see in the following excerpt: “Everyone has the right to an ecologically balanced environment, a common use of the people and essential to a healthy quality of life, imposing on the Public Power and the community the duty to defend it and preserve it for present and future generations” (BRASIL, 1988).

However, we live in a dilemma in which we decide whether we use the natural environment as merchandise, for capitalist purposes, or if we recognize it as a patrimony of humanity, fundamental for the maintenance of life. Thus:

Environmental education, in a critical perspective, cannot give up the theoretical-methodological rigor in reality analysis. Critical thinking, by unveiling the capitalist mode of production, its structure internal, the contradictions it engenders as a social process, its material limits, also points out the mechanisms for concealing this reality, elaborated by the dominant ideology. Is important understand the fundamental features of a system that is based on social exclusion, the exploitation of working class, the destruction of nature and the commodification of all elements of nature and the social and cultural dimensions of human relations (TREIN, 2008, p. 43).

We can perceive Environmental Education (EE) as a dimension that can be used to those individuals can build values, knowledge and skills to be agents transformers through actions that lead to environmental conservation and sustainability. This is why EE should be considered “an essential and permanent component of education national level, having to be present, in an articulated way, in all levels and modalities of the process educational, formal and non-formal” (Art. 1 of Law No. 9,795/99).

The educational process, in itself, should seek to raise students' awareness of environmental and social issues through the development of strategies, from which students obtain relevant information

and build knowledge in a meaningful way, contributing to the development of a critical conscience in order to face socio-environmental problems. Regarding the problems surrounding the environment, Maldonado (1971) says that they can be considered more of a crisis of society than of nature. In this sense, EE not only aims at environmental issues focused on the natural or wild, but also covers ethical and political issues of society that we are inserted in, this because “The natural world and the social world influence themselves, making it impossible to dissociate them” (ARAÚJO, 2015, p. 210). Ventura and Souza (2010), affirm that EE emerged aiming to face the growing environmental crisis, articulating the social and environmental dimensions.

Therefore, we realize that EE has the characteristic and, therefore, the possibility, the transformation and humanization, because it allows individuals to reflect on their relationship with nature and the environment. About this, Carvalho (2006), affirms that EE promotes affective sensibilities and capacities for a new reading of the world. Sato (2003), in his turn, understands that this awareness provided by EE is very important for changing socio-environmental attitudes, and Araújo (2015, p. 209) affirms that “it is creating, recreating and deciding that the human being dynamizes the world socio-environmental, in a process that Paulo Freire calls Integration”. Just integrated into the world, developing the feeling of belonging and the criticality is that the human can have understandings and positively modified attitudes.

For Trein (2008), EE can contribute to expand a critical view of society and, with that, encourage greater participation of Brazilians in discussions about public policies and social movements that are focused on solving environmental problems. Araújo (2015, p. 146) states: “[...] The discussion and analysis of these issues contribute to the formation of a subject humanized and critical - subject aware of the environmental and social reality, of the inseparability between these two conditions of being a transformer, who can intervene in them”. In this context, the dialogue assumes a prominent place for the construction of humanization and criticality, as it allows seeing the issues socio-environmental aspects from the perspective of social praxis, which is the compromise between reflection, think about the relationship between society and the world and transformative practice (Ibid., p.148).

However, “it is necessary to situate the conceptual and political environment where environmental education can seek its foundation as an educational project that aims to transform the society” (CARVALHO, 2006, p. 18). To this end, we must escape environmental education along the “bank education” molds in which “its educational practice, reproduces the paradigms of modern society, among them scientism, cartesianism and anthropocentrism that results in a disintegrated relationship between society and nature” (PIEPER; SANTOS; PIMENTEL, 2012, p. 697). That is, we must seek an emancipatory transformative critical EE that:

[...] It stimulates authentic and emancipated thinking that is not confused by partial views of reality. Thus, it should be inspired by educational actions that position education immersed in the world of life, historicized and spatially situated, connected to the urgent issues of our time, which adds a specificity of understanding society-nature relations, in a process of formation of emancipated subjects, authors of their own history, seeking to reconnect the knowledge of the world to the lives of students to make them critical readers of their world to intervene in environmental problems and conflicts (Ibid., p. 697-698).

This conception of the power of humanizing, critical, emancipatory and transforming education approaches Freire's thinking. In his works, Paulo Freire dialogues about education as agent of transformation and inseparability of the social environment with the environment.

Lima (2004) tells us that education is an important instrument of social change that can contribute positively to social and cultural changes in a society, but it has its limits, because it does not have the power to solve all the problems that arise, nor to carry out transformations with the breadth and depth that are often expected. On the other hand, “[...] It can stimulate sensitivities, awaken

consciences and exercise liberating, humanizing and citizens capable of promoting the life and relationships of individuals with themselves, their similars in society and with the environment” (Ibid., p. 111-112).

The methodology used by Paulo Freire for adult literacy and his works are widespread throughout the world and “Paulo Freire’s education has been a field of study carried out by researchers in Research Groups, Research Centers, Institutes and Chairs Paulo Freire, established in several countries in Latin America, among others” (OLIVEIRA; SANTOS, 2018). In Brazil, we have 08 (eight) Chairs, 01 (one) Institute and 01 (one) Paulo Freire Center. The Chairs are distributed in four regions: North, Northeast, South and Southeast. The most recent being Paulo Freire Chair: Education for Sustainability, inaugurated on September 20, 2018 at Universidade Federal Rural de Pernambuco (UFRPE), in Recife - PE.

The Paulo Freire Institute (IPF) was born from the idea of Paulo Freire (1921-1997), from his desire to bring together people and institutions so that they could reflect and improve their practices on humanizing and transformative education, the IPF aims to continue the legacy of Paulo Freire “educate to transform”, and promote an emancipatory education, fight injustice, discrimination, violence, prejudice and exclusion (Instituto Paulo Freire).

The Paulo Freire Center - Studies and Research “was created by the hands of a group of teachers from different institutions” (SANTIAGO; BATISTA NETO; GUEDES, 2016, p. 151), and started its activities in 1998. Its objective is “to promote, stimulate and publicize the realization of studies, research, courses, pedagogical innovations and seminars on Brazilian education, particularly, regarding political and social implications” (JORNAL UTOPIA, 2000). The seat of The Paulo Freire Center is located at the Education Center on the Campus of the Universidade Federal de Pernambuco (UFPE).

According to Santiago, Batista Neto and Guedes (2016), Paulo Freire’s presence is evidenced through its legacy where there is a political-educational praxis with teaching, research and extension and with the recognition of the contribution of the Brazilian and planetary educator.

In view of the approximation of the EE with the Freirean thoughts and methodology, it becomes important to investigate the conceptions about EE by the directors of Chairs, Center and Paulo Freire Institute and what actions have been developed with EE in these training spaces.

Given this context, the present work has the general objective of understanding the conceptions of the directors of Chairs, Center and Paulo Freire Institute about EE in these training spaces. For achieve it, we outline as specific objectives: to analyze the influence of Paulo Freire for works with EE in the vision of the leaders of these spaces; identify the actions developed there that involve the EE; and map contributions from actions developed with EE.

1 Methodology

The social actors in this research are leaders of the Chairs, Center and Paulo Freire Institute. They were contacted by email or phone and, after clarification regarding the research, the place and time for the interview was scheduled when they were asked to sign an Informed Consent Form (ICF) so that their statements could be explained in the research without identifying them.

We used the interview for data collection, after all it is considered one of the modalities of interaction between two or more people with a purpose other than mere conversation, because in it the use of the word, symbol and sign is valued, due to its value for communicative relationships (FRASER; GONDIM, 2004). Still according to Gil (2008, p. 117, highlight of author):

It is easy to see how, among all interrogation techniques, the interview is the one with the greatest flexibility. So much so that it can take the most diverse forms. It can be characterized as informal, when it is distinguished from simple conversation just for having the basic

objective of collecting data. Can be focused when, although free, it focuses on a very specific topic, and the interviewer must strive to for the interviewee to return to the subject after a tour. It can be partially structured, when it is guided by a list of points of interest that the interviewer explores throughout his course. Finally, it can be fully structured when it develops from a fixed relationship of questions. In this case, the interview is confused with the form.

In this sense, we used an interview script composed of guiding questions, that could easily be added other questions depending on the answer presented by the interviewee, in order to achieve the specific objectives outlined in the present work. Are they:

1. What is your conception in relation to the influence of Paulo Freire for works with the Environmental Education?
2. Does the Chair / Institute develop actions that involve Environmental Education?
3. (if so) What actions are developed? How often? Could you quote contributions of these actions?
4. (if not) Why aren't activities involving Environmental Education developed?

The interviews were recorded on audio and transcribed, as suggested by Schraiber (1995), the use recorder makes it possible to expand the capture of extremely important communication elements, such as pauses for reflection, doubts or intonation of the voice, thus improving the understanding of narrative that we intended to analyze. As we are guided by Belei et al. (2008), to perform the analysis we transcribe the interviews in full, including paying attention to non-words, the intonation of the voice and possible gestures that we record.

The analysis was carried out following the guidelines of Bardin (1994). With regard to the analysis of content, the author states that the analysis consists, in general, in the decomposition of the speeches and identification of common categories, taking into account the context in which the research is inserted. The Content analysis is divided into three stages: pre-analysis, exploration of the material and treatment of data. The first step (pre-analysis) consists of the organization of the material; the second step is the moment deepening guided by the hypotheses; and the third and last moment is the treatment of data, that is, the analysis itself.

To guarantee the anonymity of the research participants, we identified them by the letter "L" for "leader" and a number. In total, the leader of the Paulo Freire Institute, the Paulo Freire Center and leaders of the Paulo Freire Chairs located in the North (1), Northeast (2), South (1) and Southeast (2) and a former leader, as he was appointed by the current management to be interviewed for having been the founder of the Chair. The other social actors will be interviewed posteriorly.

2 Results and discussion

Through the answers obtained, we could perceive the conceptions about environmental education in these formative spaces, Paulo Freire's influence for works on EE and what actions are being developed involving environmental education. It is worth noting that the fourth question was not answered by any interviewee, as the leaders interviewed so far have informed that activities involving EE are developed in those spaces.

In the following items, we present the detailed responses of the officers.

2.1 Paulo Freire's influence on environmental education

Initially, L1 states that “Paulo Freire's contribution is very vast and his thinking without borders”, he also points out that “it is the fields of knowledge that Paulo Freire seeks to contribute and not Paulo Freire who defines the place of his understanding”. Regarding Freire's contributions for the scientific community, research carried out by the Freirean Network of Researchers (RFP) reaffirms that it occurs in several fields and areas of scientific knowledge (SAUL, 2012, 2016). Regarding Freire's specific contributions to EE, Torres and Delizoicov (2009) certify that the works that make this approach have been increasing over time in the environments formal.

Saul (2016, p. 12) points out that the current state of Freire's thought is easily verifiable due to the “multiplicity of theoretical and practical works that are developed, taking their thinking and its practice as references, in different areas of knowledge, around the world”. Cortella corroborates this thought by stating that Paulo Freire “is a classic because his work does not lose vitality, lost irrigation, connection with life and the blood that life shares and emanates” (2001, p. 11). Paulo Freire's work has inspired several education networks in Brazil, which are committed to critical-emancipatory education (SAUL, 2012, 2016; SILVA, 2015). Second Araújo (2015), *what to do* is a term created and studied by Paulo Freire, which expresses the inseparability of the theory of practice that becomes concrete by reflection-action beings.

L1 also highlights the relational perspective, as we can see in his speech:

[...] Paulo Freire's contribution is from the moment we start to think who this is subject, who is this human being, who is man, who is woman, regardless of their size, their age, their schooling, what is the relationship of this being with the world [...].

L1's speech highlights, among other things, a characteristic of the human being pointed out by Freire, who identifies us as “beings of relationships” (FREIRE, 1996; FREIRE; FAUNDEZ, 2002). We also emphasize that, for Freire (1989, p. 39-40) “there is a plurality of relations between man and the world as it responds to the wide variety of its challenges”.

Regarding the term “world”, for Freire it has several meanings, considering that, in some moments refer to reality, or nature, or even the system. Thus, “the pole world starts to be taken in its sense of social reality, historical space and, therefore, contradictory, changeable. It is the world of class oppression and multiple contradictions” (CALADO, 2001, p. 20). In *Education as a Freedom Practice*, Freire goes on to clarify that:

[...] The relationships that man has in the world with the world (personal, impersonal, corporeal and incorporeal) present such an order of characteristics that distinguish them totally from the pure contacts, typical of the other animal sphere. We understand that, for man, the world is a reality objective, independent of it, possible to be known. It is essential, however, to assume that the man, to be in relationships and not only contacts, is not only in the world, but with the world. Being with the world results from its openness to reality, which makes it the entity of relationships that it is (FREIRE, 1989, p.39).

L1 goes on to affirm that, from the moment that we start to take as basis the Freire's thoughts “we must think about this relational perspective in the cultural dimension” (L1).

Because, it considers that:

[...] in Paulo Freire, culture is the life processes of people, the way people manage and guarantee your life, your survival. So, when thinking about this or from this, we already have the great contribution by Paulo Freire.

So, “it is not a method contribution, it is not an understanding of a principle, but principles are born from this broader vision of achievement” (L1). For Dickmann and Carneiro “This is one of the great Freirean contributions, the belonging of the world-nature as an interdependent unit, overcoming a dichotomous vision” and reaffirms the inseparability between society and nature (2012, p.92).

L1 reiterates that:

[...] Paulo Freire pedagogy or thought Paulo Freire is a thought or is it pedagogy of being human. Of course, when making a contribution to thinking, living, working, relating to the human being is a contribution to environmental education [...].

L2 declares that:

Paulo Freire is a necessary theoretical framework for those who research and debate environmental education, because his view is ethical-political, for all those who suffer any kind of violence and of social oppression.

In view of the responses obtained, we highlight Saul's speech (2016, p. 13) about indignation in life and Paulo Freire's work:

Paulo Freire's life and work reveal his indignation against the social injustices that deny Humanization. Since its first writings, this theme has been present, generating the utopia of its political-pedagogical proposal.

For Freire, it is part of the right thinking to reject any type of discrimination. Be it racial, of class or gender, because prejudiced practice denies democracy to individuals (FREIRE, 1996).

In Freire's perspective, through an emancipatory, critical and humanizing education, the subject can transform the world. Therefore, it is necessary to raise awareness to understand the reality "for man to assume his commitments, as a historical being, it becomes necessary that himself become aware" (ARAÚJO, 2012, p. 75). Therefore, Paulo Freire believed that through the awareness man has the potential to be more, characterized as a “process that allows individuals to be understood and to understand themselves as being whole, complex, endowed with a multiple cognitive, emotional and spiritual condition” (LEITÃO, 2015, p. 33). In short, the “subject who has the possibility of knowing and intervening in reality, transforming it” (SANTIAGO; BATISTA GRANDCHILD; GUEDES, 2016, p. 159).

In this sense L3 believes that Paulo Freire's influence occurs “mainly from the concepts such as awareness and humanization”. And he goes on to affirm:

I think that EE requires putting these concepts of awareness and humanization that are so important concepts throughout the work, and the entire trajectory of Paulo Freire.

For Freire “the more aware we become, the more qualified we are to be announcers and denouncers, thanks to the commitment of transformation that we assume” (1980, p. 28).

L4 corroborates when saying that Paulo Freire collaborates with social and environmental actions when “he is speaking of the constitution of the collective being, he is also thinking about the liberation from situations of oppression. Understanding this liberation from oppression many times within ourselves”. For Freire, the Pedagogy of the oppressed is “the pedagogy of men engaged in the struggle for their liberation” (2001, P. 22).

L4 further highlights that:

We would find a lot for environmental education when he talks about the subject. That man who knows himself and recognizes the other. So in this process of knowing the other is respect for the life of another and with my life. If I respect my life, I respect the life of the other, I have to protect the environment. I am respecting the environment. So in that sense it can bring a great contribution to environmental education.

L5 tells us that initially we must seek to understand how Paulo Freire understood his relationship with the environment. Freire said that “I would like to be remembered as someone who loved people, plants, animals, land and rivers”. And reports that in his last year he left a written about ecology, where part of it was published posthumously in the book *Pedagogy of Indignation*. So “at the end of his life, Paulo Freire was very touched by this issue of ecology”.

According to L6, there is a very strong and interesting relationship, because Paulo's thought Freire is based on humanizing pedagogy, that is, “a pedagogy that proposes another paradigm in terms of the productive system, of horizontal education relationship”. Thus:

[...] When we think about socio-environmental issues in terms of preserving and expanding life and more than that, a human life with dignity for all, a planet that also it needs to be respected and understood as a living organism in which we are in it, as Paul says Freire, with him. So, I see that it is one of the possibilities that make us hope that another education is possible, that another relationship between people is possible. And then it's up to us to do this option and this construction (L6).

According to L8, “it is not that Paulo Freire spoke or wrote about EE, but many people use to bring their teachings into the area, into the EE field”, because:

[...] when we think, for example, that EE needs to be critical is one of the categories that we finds in the life of Paulo Freire, in the work of Paulo Freire, the question of criticality, how much education needs to be critical. So we can drink in Freire's teachings in an education critical, reflective, emancipatory and liberating, and bring this into the field of environmental education. Environmental education needs to be critical, reflective, and emancipatory.

In this regard, Araújo (2015, p. 36) states that “criticality is a condition for emancipation of the subjects, for the formation of subjects who are authors of their life history, able to identify and problematize socio-environmental issues and act-reflect-act on them”. E Lima (2004) reiterates that Paulo Freire, by proposing a liberating education contributes to emancipatory environmental education through problematizing themes that generate students' daily lives, raising their awareness of the issue's environmental issues.

L7 highlights the importance of Freire's contribution to the political dimension of EE, Freire, education is a political act. And he explains that it currently bothers him the “depoliticization” of that area of knowledge, therefore:

[...] only Freire's theory can save this human activity, which also implies the human relationship with nature, with inanimate beings, with living beings ... the nature of those who are not human, who do not are of the species ... with the environment, let's be more precise, more strictly, you know, about education environmental, I think it can only be saved with Freire's theory (L7).

The politicization of issues involving AA is addressed by Lima (2004, p. 89), where he states:

The depoliticization of the environmental debate is another of the relevant reasons that stimulated reflection comparative between conventional environmental education and the possibility of another liberating education. On the one hand, it refers to a certain naive treatment given, both to the environmental issue and to education that, by understanding them as “*stricto sensu*” or technical ecological problems, ends up disregard the political and conflicting content that is at the origin of its emergence.

L7 states that “when the political dimension is removed from any human activity, this relationship is no longer human. So it doesn't make any sense to talk about the neutrality of any relationship ”, and makes it clear that the political dimension is essential and supports all fields of knowledge, especially EE. This statement corroborates Carvalho (2006) who establishes a “Model” as a guideline for the construction and planning of EE activities, highlighting the role central part of the political dimension to address such issues, identifying two more dimensions as constituents of this praxis - the dimension of knowledge and that of values.

For Layrargues (2002, p. 189), EE “is an eminently political educational process, which aims to the development in students of a critical awareness of the institutions, actors and factors social risk-generators and their socio-environmental conflicts”.

2.2 Actions developed that involve Environmental Education

According to the leaders, we can identify several actions developed by the Chairs Paulo Freire that involve Environmental Education, as we can see in Table 1, presented below:

Painting 1 - Contributions and actions developed involving Environmental Education

ACTIONS	LEADERS							
	L1	L2	L3	L4	L5	L6	L7	L8
House of Planetary Citizenship	-	-	-	-	-	X	-	-
Construction of the Development Institutional (PDI)	-	-	X	X	-	-	-	-

Youth Education and Adults (EJA)	-	-	X	X	-	-	-	-
Youth Education and Adults (in riverside communities)	-	X	-	-	-	-	-	-
Events	X	X	X	X	-	-	-	-
Teacher training	-	X	-	-	-	-	-	-
Reading group	X	-	-	-	-	X	-	X
Discipline offer for University graduate	X	-	-	-	-	-	X	X
Search	X	-	-	-	-	X	X	X
Extension Projects	-	-	X	X	-	-	-	X
Projects by the Moema Vieze Observatory	-	-	X	-	-	-	-	-
Editing Work	X	-	-	-	-	-	-	-

Source: The authors.
X = Action developed

Regarding the activities developed in the Chairs, the interviewees stated that they developed actions that involved EE in some way, either directly or indirectly. According to L1, the Chair in question develops research, publishing work and events that disseminate this thought. Already from more broadly, there is an offer of elective interinstitutional discipline for graduation “open to all university students, undergraduate students from other institutions and graduates of up to five years”. The discipline also counts with the participation of postgraduate people “who come as listeners or even come with enrollment, but without counting points”, he says.

A reading group is also developed, “the reading group is a group that, in fact, also makes his contribution on Paulo Freire's influence or contribution to education environmental” (L1). When referring to the reading group, L1 points out: “there we really have a group that it is plural, interprofessional, interinstitutional, so it is a very interesting job”. Regarding this type of activity (reading group) Santa Anna (2017, p. 40), explains that: “[...] Reading is associated with the manifestation of citizen practice, constituting one of the rights of individuals to have access to book and reading, therefore, guided by democratic principles, it will be up to the State and other social institutions promote policies, in order to awaken the practice of reading in society”.

This shows the positive contribution of this type of action, which is not limited to the construction knowledge through reading. As stated by Freire (2009), reading enables the individual development that will cause development and transformation in the environment where the subject Act.

L2, in turn, stated that events on EE are held in which they are developed debates involving themes like “popular education in the Amazon, with the participation of Movements Including the Movement of People Affected by Dams, and populations of waters and forests”.

For Campello (2000), scientific events can play several roles: meetings as a way of improving scientific works, since the works presented change substantially after appreciation of events; encounter as a reflection of the state of the art, the works presented during the event may reflect the panorama of the area and the profile of its members and meetings as a form of informal communication, as informal conversations with their Peers form an important part of events.

L3 highlights “a very important aspect to be highlighted is that the Paulo Freire Chair is linked to the Mercosul Institute for Advanced Studies, MIAS”. Another aspect the leader highlighted was that the Chair brings together professors who work with different theoretical references. It also tells us that the Chair organized an event that aimed to propose a debate for the construction of the Institutional Development Plan (IDP). This event “made it possible to recover initial project of our university and also to project new horizons. It was a very beautiful, very intense that I experienced that allowed me to understand the potential of the Paulo Freire Chair”.

L4 tells us about some concepts and some propositions that moved different activities of the Chair since its creation. First, “we were concerned that the different areas should, in a way, advise, assist in the creation and development of the courses that the university was opening”. Through this need, it was proposed to create the Chair “but not to we call it the Education Chair because we didn't want to. So we call Paulo Freire Chair”.

After the creation of the Chair, they proposed a series of activities related to extension projects. These activities, in a way, were suggestions from students who were interested in doing something with the population. In some of these extension activities, a group went to the community “Helping people to take care of the environment, to do environmental education. Simple jobs, but a lot significant” (L4). According to Rodrigues et al (2013), when extension activities are developed there is a strengthening of the university-society relationship, enabling contributions in both parties. In addition, they can also generate quality of life for citizens.

L4 also addresses some concepts related to extension, such as interdisciplinarity, integration and parallel curriculum that relate to each other. When talking about integration, the leader mentions a problem that took place inside the university, in which he contributed to the empty speech of integration: “we were with the integration discourse, but physically we disintegrated”. However, she

points out that “the integration happens little in the university curriculum, but in the parallel curriculum it is the difference of [university where it is based]”. Consequently, according to L4, the parallel curriculum occurs very more outside the university “when a Colombian, a Chilean and a Peruvian get together to make a meal, to discuss their country's politics, their country's economy, the dream when they come back”.

Thus, all the concepts mentioned are related to interdisciplinarity. Then L4 states that, for a period, they found that interdisciplinarity was just a discourse in which put together “a little bit of geography, with a little bit of history and then we have the interdisciplinarity”. However, “Interdisciplinarity is fundamentally an attitude and a thinking,” he says.

For Fazenda (2015), when defining interdisciplinarity only as a combination of disciplines, we only think about the formatting of your grade or curriculum, but if we think of a bold attitude in search for knowledge, we must take into account aspects such as culture. Thus, we must take into account the inseparability of interdisciplinarity and integration.

L5 points to the development of the home of planetary citizenship “with the idea that ecology has no borders”. Projects were also developed addressing the theme and research that resulted in a doctoral thesis. He also highlights “I wrote a book on the pedagogy of land, which was requested by my students. There are 7 lessons on the subject, showing this dimension socio-environmental”.

L6, in turn, highlights the development of the reading group as one of the actions developed in which it considers it “stronger”. In which they have already read the books *Pedagogy of Oppressed* and *Pedagogy of Hope*. The Reading Group was designed “to encompass and expand the participation possibilities, cover the largest number of most direct participants”.

L7 declares that the Chair in which he works is linked to the graduate program in education of the educational institution in which it is based, assuming the role of a research group, where there contribution of several other professors who carry out research referenced in Paulo Freire, both in master's and doctorate.

In addition, the Chair has been offering courses and workshops for undergraduate students in the under a project called “School of Science”. The same states that they have priority in the *Escola da Ciência* project students wishing to develop a scientific initiation project, and that the university provides them with a scholarship. The leader emphasizes the issue of the importance of encouraging a research culture also at graduation.

According to L8, the Chair he directs is the result of his postdoctoral work, where he researched how sustainability is present in Freire's spaces. According to it, the space currently develops research with institutional funding that would be the continuation of its postdoctoral work. In addition, the Chair works in the surrounding community with extension projects and courses on EE, offering reading groups on Freirean works, and minister a discipline for undergraduate students.

3. Contributions of actions developed with EE

Regarding the contributions of actions developed and their frequency, L2 reports that “they have already been Youth and Adult Education activities were developed in riverside communities where environmental issues were addressed”. And reiterates: “Currently environmental issues are dealt with in philosophy classes with children in public schools and Youth and Adult Education classes in hospital an environment, whose population comes from the interior of the state and comes from communities riverside, quilombola, indigenous, etc”.

L2 goes on to affirm that, in the environment of the Popular Education Center Paulo Freire (NEP), In addition to Youth and Adult Education activities in riverside communities, educator training activities, where EE issues in the Amazon are also dealt with.

In the Chair, L2 informs that “research is being initiated that deals with popular education in different educational contexts, some in indigenous and quilombola communities”. And highlights:

Although the focus of these researches is not environmental education, it runs through the debate in research carried out. It is important to highlight that the thematic areas of research of the Chair involve education and rural, water and forest education in the Amazon, indigenous education, quilombola and social movements in the Amazon.

L2 concludes by saying: “because Paulo Freire is the main reference of NEP and the Chair, the question environmental has always been prominent in the ethical-political discussion of the lives of men and women in Amazon, in view of the biodiversity of this region”.

In relation to this issue, L3 pointed out that there are members who develop work with the environmental education promoting projects through the Moema Vieze Environmental Educator Observatory. However, in an indirect way, activities such as Youth and Adult Education are developed which, according to her, they go through the “issue of environmental education, since they focus on issues such as awareness, humanization. What I say again are such important issues for Paulo Freire and for EE”, said L3.

L4 corroborates when emphasizing the education of youth and adults as “and education to reduce the oppression” L4. And stresses:

[...] Within adult education a concept appears that is important: educating adults is not only educate, or only illiterate people participate in the educational process. It is a condition that we have there. Of course we are doing education in general, education for citizenship, education to train the being, for human development. That was the adult education we were thinking about.

Therefore, “adult education corresponds to being adult, education for the one who develops, and continues at that moment with an adult person” (L4). However, it was necessary to rethink training of teachers in order to achieve this goal. And so “the Chair, in a way, was thinking also with this objective of general education, adult education, teacher training and, consequently, contribute to the university's pedagogical political project” (L4).

L5 points to the dimension of sustainability as a fundamental category of education the present and the future. And it states that the contribution to environmental education:

It is not just walking on the trails, entering the sea, protecting the plants, but, above all, protecting the place of work so that it is dignified, so that it is not degraded, so that the school environment or does not contribute for this integrated vision of the human being. We know that Paulo Freire used to say that there is no teaching-learning outside of demand, of beauty and joy. I emphasize the beauty, I think it's all about with environmental education.

In turn, L6 states that he does not have the “specific focuses on this theme using specialized authors on the topic, yet”. However, it has already been sought for a consultation of a project of doctorate from one of the professors at the university where he works who would like to work with Education Environmental in the curricula of different countries in the world and has made progress in this direction. He too reports that one of the participants in the research group, in another specialization, developed a work with issues related to Porto, the production of waste and the training of workers in the Porto “using the Freirean framework as a possibility of seeking awareness there. Self-awareness, awareness of work, of the struggle for better conditions, better relations with the environment”. And he emphasizes that the research group seeks to keep the thought of Paulo Freire present, strongly, within the research carried out not only by the group members, but also by those who

would like to have Paulo Freire as a theoretical reference. Therefore, the Chair can help in this approximation. And reiterates: “[...] other students from other groups, when they come to the Chair's activity, in general, they also seek a reference for research. And, in contrast, also enrich our work by bringing possibilities there”.

According to L7, the Chair has contributed academically to the development of the theme of EE. There are currently two researches in this line, one on the concept of environmental literacy and another on the work of Francisco Gutiérrez, who “of the Freirians, was the one that most dealt with the issue environmental” (L7).

L8 claims that it has been addressing the theme in the areas of research, extension projects and discipline taught as a teaching action. Emphasizes that research addresses the issue of sustainability in Freirian spaces, and about reading groups, declares:

The first work of the people at the Chair was the Pedagogy of Autonomy, in the second reading group we work on Pedagogy of the Oppressed, and then understanding sustainability in a very broad, not only as environmental. These reading groups also favor sustainability because the people can bring Paulo Freire's pedagogy to be discussed with people from within the university and outside the university.

Given these responses, we infer that there are several actions developed with EE in the spaces courses that foster Paulo Freire's thinking and pedagogy.

Final considerations

According to the leaders, Paulo Freire influences environmental education works. Because the Paulo Freire's worldview and conceptions are also explored by environmental education, seeking transformation through critical socio-environmental actors, who may be writers of their history itself.

In addition, we can see several actions developed in the Paulo Freire, Center and Institute, which are: scientific events, provision of disciplines, research, extension, reading groups, teacher training and traditional youth and adult education and communities riverside and quilombola activities. At the Paulo Freire Institute, we found as one of the actions developed to home of planetary citizenship and research projects. Thus, it is undeniable that these training spaces are the focus of research, teaching and extension actions, bringing diverse contributions different social actors, which can be: teachers in initial or continuing education, young people and adults in the process of literacy, graduate students, among others.

Freire's thought has no boundaries, being used as a theoretical framework by the importance of its ethical-political perspective. Such a look has always been focused on educational processes, for Freire, education is capable of changing people and they can change the world. In this perspective, invest in different educational processes, as the training spaces investigated here are doing, it represents hope and trust in human beings. And we humans have the ethical and aesthetic responsibility to respect the natural world and the social world, moving towards socio-environmental sustainability.

Acknowledgment

We thank the Paulo Freire Chair - Education for Sustainability (UFRPE) for making our search; to the Pro Rectory of Research and Graduate Studies at UFRPE, as well as CNPq for their financial support; to the Directors of the Chairs, Institute and Paulo Freire Center for their welcome.

References

- Araújo, M. L. F. ***O que fazer da educação ambiental crítico-humanizadora na formação inicial de professores de biologia na universidade***. 2012. 240 f. Tese (Doutorado em Educação) – Programa de Pós-Graduação em Educação, Universidade Federal de Pernambuco, Recife.
- Araújo, M. L. F. ***A educação ambiental crítico-humanizadora na formação de professores de biologia***. Recife: Ed. UFPE, 2015.
- Bardin, L. ***Análise de conteúdo***. Lisboa: Edições 70, 1994.
- Beleí, R. A. et al. ***O uso de entrevista, observação e vídeo gravação em pesquisa qualitativa***. Cadernos de Educação, Pelotas: UFPel, 2008. Recovered in 15 nov. 2018.
http://www.unisc.br/portal/upload/com_arquivo/1350501221.pdf
- Brasil. ***Constituição da República Federativa do Brasil***. Brasília, DF: Senado Federal: Centro Gráfico, 1988. 292 p. Recovered in 10 Jan. 2019.
http://www.planalto.gov.br/ccivil_03/Constituicao/Constituicao.htm
- Calado, A. J. F. ***Paulo Freire: sua visão de mundo, de homem e de sociedade***. Caruaru: Edições Fafica, 2001.
- Campello, B. S. Encontros científicos. In: Campello, B. S.; Cendón, B. V.; & Kremer, J. M. (ORG). ***Fontes de informação para pesquisadores e profissionais***. Belo Horizonte: Ed. UFMG, 2000, p. 7-307.
- Carvalho, I. C. M. ***Educação ambiental: a formação do sujeito ecológico***. 2. ed. São Paulo: Cortez, 2006.
- Cortella, M. S. Paulo Freire: um pensamento clássico e atual. ***Revista e-Curriculum***, São Paulo, v.7, n.3, p. 1-14, set./dez. 2001.
- Dickmann, I.; & Carneiro S. M. M. Paulo Freire e Educação ambiental: contribuições a partir da obra Pedagogia da Autonomia. ***R. Educ. Públ.*** Cuiabá, v. 21, n. 45, p. 87-102, jan./abr. 2012
- Fazenda, I. C. A. Interdisciplinaridade: Didática e prática de ensino. ***Revista Interdisciplinaridade***, São Paulo, v.1, n.6, p. 09-17, 2015.
- Fraser, M. T. D.; & Gondim, S. M. G. Da fala do outro ao texto negociado: discussões sobre a entrevista na pesquisa qualitativa. ***Revista Paideia***, São Paulo, v. 14, n. 28, p. 140 -152, 2004.
- Freire, P. ***Conscientização: Teoria e Prática da Libertação – Uma introdução ao pensamento de Paulo Freire***. São Paulo: Moraes, 1980.
- Freire, P. ***Educação como Prática da Liberdade***. 19. ed. Rio de Janeiro: Paz e Terra, 1989.
- Freire, P. ***Pedagogia da autonomia: saberes necessários à prática educativa***. 31. ed. São Paulo: Paz e Terra, 1996.

- Freire, P. *Pedagogia do oprimido*. 31. ed. Rio de Janeiro: Paz e Terra, 2001.
- Freire, P. *A importância do ato de ler: em três artigos que se completam*. 26. ed. São Paulo: Cortez, 2009.
- Freire, P.; & Faundez, A. *Por uma pedagogia da pergunta*. 5. ed. Rio de Janeiro: Paz e Terra, 2002.
- Gil, A. C. *Métodos e técnicas de pesquisa social*. 6. ed. São Paulo: Atlas, 2008.
- Instituto Paulo Freire. *O instituto Paulo Freire: Gênese e evolução*. Recovered in 10 Out. 2019. <https://blog.fastformat.co/como-fazer-citacao-de-artigos-online-e-sites-da-internet/>
- Jornal Utopia. *Informativo do Centro Paulo Freire*. Recife: n. 1, Set./Out., 2000.
- Layrargues, P. P. A crise ambiental e suas implicações na educação; In: quintas, J. S. (Org). *Pensando e praticando educação ambiental na gestão do meio ambiente*. 2a ed. Brasília: Edições IBAMA, 2002.
- Leitão, E. S. S. *A prática pedagógica docente na perspectiva da humanização em Paulo Freire na EJA de Olinda*. 2015. 129f. Dissertação (Mestrado em Educação) - Universidade Federal de Pernambuco, Recife, 2015.
- Lima, G. F. C. Educação, Emancipação E Sustentabilidade: Em Defesa De Uma Pedagogia Libertadora Para A Educação Ambiental. In: layrargues, P. P. (coord.). *Identidades da educação ambiental brasileira*. Brasília: MMA, 2004. p. 87-113.
- Maldonado, T. *Meio ambiente e ideologia*. Lisboa: Sociocultur, 1971.
- Oliveira, I. A.; & Santos T. R. L. Paulo Freire na América Latina e nos Estados Unidos: Cátedras e Grupos de Pesquisas. *Revista Educação em Questão*, Natal, v. 56, n. 48, p. 106-139, abr./jun. 2018.
- Pieper, D. S.; Santos, T.; & Pimentel, R. Meio ambiente e justiça ambiental: a educação ambiental como práxis social. *Revista Eletrônica em Gestão, Educação e Tecnologia Ambiental REGET/UFSM*, v. 5, n. 5, p. 696-704, 2012. Recovered in 19 Mar. 2019. <https://periodicos.ufsm.br/reget/article/view/4142>
- Rodrigues, A. L. L. et al. *Contribuições da extensão universitária na sociedade*. Cadernos de Graduação - Ciências Humanas e Sociais, Aracaju, v. 1, n.16, p. 141-148, Mar. 2013.
- Santa Anna, J. A Importância da leitura e as contribuições das instituições: em busca de uma sociedade leitora no brasil. *Pró-Discente: Caderno de Produção Acadêmico-Científica*. Programa de Pós-Graduação em Educação, Vitória- ES, v. 23, n. 2, p. 34-53, jul./dez. 2017.
- Santiago, E.; Batista Neto, J.; & Guedes, M. G. M. Cátedra Paulo Freire da Universidade Federal de Pernambuco: memória e atualidade tecidas a várias mãos. *Anais do Colóquio Internacional Paulo Freire*. 2016. Recovered in 19 Mar. 2019 <http://coloquio.paulofreire.org.br/participacao/index.php/coloquio/ix-coloquio/paper/view/782/530>
- Sato, M. *Educação ambiental*. São Carlos, SP: RIMA, 2003.

Saul, A. M. Paulo Freire na atualidade: legado e reinvenção. *Revista e-Curriculum*. São Paulo, v.14, n.01, p. 09 – 34, 2016.

Saul, A. M. *Relatório técnico da pesquisa o pensamento de Paulo Freire na educação brasileira: análise de sistemas públicos de ensino a partir de 1990 - período 2010 a 2012*. São Paulo: PUC-SP, 2012. Recovered in 10 nov. 2018.

<https://revistas.pucsp.br/index.php/curriculum/article/viewFile/27365/19377>

Schraiber, L. B. Pesquisa qualitativa em saúde: reflexões metodológicas do relato oral e produção de narrativas em estudo sobre a profissão médica. *Revista de Saúde Pública*, São Paulo, v. 29, n. 1, p. 63-74, 1995.

Silva, P. M. *A presença freireana no currículo da Escola Plural*. 2015. Dissertação (Mestrado em Educação) – Pontifícia Universidade Católica de Minas Gerais, Belo Horizonte, 2015.

Torres, J. R.; & Delizoicov, D. Fundamentos da concepção educacional de Paulo Freire na pesquisa em educação ambiental no contexto formal: 12 anos de ENPEC. In: Encontro Nacional De Pesquisa Em Ensino De Ciências, 2009, Florianópolis, Santa Catarina. *Anais*. 1 CD-ROOM, 2009.

Trein, E. S. *A Educação Ambiental numa Perspectiva Crítica*. In TV Escola – Série Salto para o Futuro. A Perspectiva Crítica e Emancipatória da Educação Ambiental. Programa 4. Secretaria de Educação à Distância. Ministério da Educação. Ano XVIII, p. 41-45, 2008.

Ventura, G.; & Souza, I. C. F. Refletindo sobre a relação entre a natureza humana, valores capitalistas e a crise ambiental: contribuições para a promoção da Educação Ambiental Crítica. *Revista eletrônica Ambiente e Educação*. Rio Grande, v.15, 13-34, 2010.

About the authors

MARCOS PAULO DA SILVA SANTANA

 ORCID: <https://orcid.org/0000-0003-3820-8635>

Undergraduate student in the Full Degree course in Biological Sciences at UFRPE; Member of Paulo Freire Chair - Education for Sustainability at UFRPE and Member of the Research Group in Pedagogical Training and Practice of Science and Biology Teachers (FORBIO) at UFRPE.

Email: m.paulosantana@hotmail.com

RAYANNE FERNANDA DA COSTA MELO

 ORCID: <https://orcid.org/0000-0001-9367-7085>

Master's student in the Graduate Program in Science Teaching (PPGEC) at UFRPE; Graduated in Full Degree in Biological Sciences (2019) by UFRPE; Chair of the Chair Paulo Freire - Education for Sustainability at UFRPE and Member of the Research Group on Pedagogical Training and Practice of Science and Biology Teachers (FORBIO) at UFRPE.

Email: rayannefernanda65@gmail.com

MONICA LOPES FOLENA ARAÚJO

 ORCID: <http://orcid.org/0000-0002-0688-9782>

Professor at the Department of Education at UFRPE; Post Doctorate in Education (2018) by UFS; PhD in Education (2012) from UFPE; Master in Science Teaching (2008) by UFRPE; Coordinator of the Paulo Freire Chair - Education for Sustainability at UFRPE and Leader of the Research Group on Training and Pedagogical Practice of Science and Biology Teachers (FORBIO) of UFRPE.

Email: monica.folena@gmail.com

Submitted: Aug. 7 2020

Accepted: Aug. 28 2020