



EDUCATION FOR SUSTAINABLE DEVELOPMENT AND POPULAR ENVIRONMENTAL EDUCATION IN THE PERCEPTION OF ENVIRONMENTAL **EDUCATORS IN BRAZIL AND MEXICO**

A EDUCAÇÃO PARA O DESENVOLVIMENTO SUSTENTÁVEL E A EDUCAÇÃO AMBIENTAL POPULAR NA PERCEPCÃO DE EDUCADORES AMBIENTAIS NO BRASIL E NO MÉXICO

UNA EDUCACIÓN PARA EL DESARROLLO SOSTENIBLE Y LA EDUCAÇÃO AMBIENTAL POPULAR EN LA PERCEPCIÓN DE LOS EDUCADORES AMBIENTALES EN BRASIL Y EN MÉXICO

Vilmar Alves PEREIRA¹ e-mail: vilmar.alves@unini.edu.mx

Jaime José ZITKOSKI² e-mail: jaimezitkoski@gmail.com

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¹ International Iberoamerican University (UNINI) Campeche – Mexico. Senior Postdoctoral Fellow Professor (PDS/CNPq) at the Postgraduate Program in Education at the Federal University of Rio Grande do Sul (UFRGS).

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² Federal University of Rio Grande do Sul (UFRGS), Porto Alegre - RS - Brazil. Postdoctoral Supervisory Professor at the Postgraduate Program in Education.

ABSTRACT: This study aims to present perceptions of environmental educators about Education for Sustainable Development (EDS) and Popular Environmental Education (EAP). The result of a Postdoctoral Internship starts, at first, with an epistemological conceptual establishment of the horizons of the (EDS) and the (EAP). In a second moment, through a qualitative approach with epistemology of philosophical hermeneutics, it listens to 10 (ten) researchers in Environmental Education on the subject, 5 (five) from Brazil and 5 (five) from Mexico. The results demonstrate the difference between the projects of each educational matrix. They point to the growth of (EDS) in the region as a neoliberal policy that is already part of the National Education Plan in Brazil and the National Development Plan in Mexico. Perceptions consider the non-achievement of (EDS) objectives and suggest the adoption of (EAP) or Environmental Education for Sustainability.

KEYWORDS: Popular Environmental Education. Sustainable Development. Brazil. Mexico.

RESUMO: Este estudo tem por objetivo apresentar percepções de educadores(as) ambientais sobre a Educação para o Desenvolvimento Sustentável (EDS) e a Educação Ambiental Popular (EAP). Resultado de um estágio em nível de pós-doutorado, parte, num primeiro momento, de um estabelecimento conceitual epistemológico dos horizontes da (EDS) e da (EAP). Num segundo momento, através de uma abordagem qualitativa com epistemologia da hermenêutica filosófica, realiza a escuta de 10 (dez) pesquisadores(as) em Educação Ambiental sobre o tema, sendo 5 (cinco) do Brasil e 5 (cinco) do México. Os resultados demonstram a diferença dos projetos de cada matriz educacional. Apontam para o crescimento da (EDS), na região, enquanto política neoliberal que já integra o Plano Nacional de Educação do Brasil e o Plano Nacional de Desenvolvimento do México. As percepções consideram o não atingimento dos objetivos da (EDS) e sugerem a adoção da (EAP) ou da Educação Ambiental para a Sustentabilidade.

PALAVRAS-CHAVE: Educação Ambiental Popular. Desenvolvimento Sustentável. Brasil. México.

RESUMEN: Este estudio tiene como objetivo presentar las percepciones de los educadores ambientales sobre la Educación para el Desarrollo Sostenible (EDS) y la Educación Ambiental Popular (EAP). El resultado de una Práctica Posdoctoral parte, en un primer momento, de un establecimiento conceptual epistemológico de los horizontes de la (EDS) y la (EAP). En un segundo momento, a través de un abordaje cualitativo con epistemología de la hermenéutica filosófica, escucha a 10 (diez) investigadores en Educación Ambiental sobre el tema, 5 (cinco) de Brasil y 5 (cinco) de México. Los resultados demuestran la diferencia entre los proyectos de cada matriz educativa. Señalan el crecimiento de (EDS) en la región como una política neoliberal que ya forma parte del Plan Nacional de Educación en Brasil y el Plan Nacional de Desarrollo en México. Las percepciones consideran la no consecución de los objetivos de la (EDS) y sugieren la adopción de (EAP) o Educación Ambiental para la Sostenibilidad.

PALABRAS CLAVE: Educación Ambiental Popular. Desarrollo Sostenible. Brasil. México.

Introduction

Education for Sustainable Development (EDS) is one of the most sought-after themes in the current educational situation. It arrives together with movements of broad paradigmatic crises that we have been experiencing for some time, but which have worsened in the context of the Covid-19 pandemic. Thus, with Latin America being one of the regions most affected by the health crisis in the world, the increase in social inequality calls for emergency and also long-term actions. It is in this context of increasing hunger, the worsening climate crisis, the health emergency, digital exclusion, increased vulnerabilities, the economic crisis, the need for its recovery, and the redefinition of projects that EDS reappears, with great strength, with indications of contributing to an educational project to eradicate poverty, reduce inequalities, and protect the environment (CEPAL, 2022).

However, we know that this claim has historical, cultural, social, and epistemological roots, and is associated with broad movements that emerged in the second half of the last century. Even though it may seem like a fashionable theme, it has already been problematized for a long time by experts in the field of human sciences, as an expression of a societal project in the context of neoliberal policies, anchored in a concept of development associated with the concept of economic growth (SAUVÉ, 1997; HESSELINK; VAN KEMPEN; WALS, 2000; MEIRA; SATO, 2005; BASTOS; SOUZA, 2013).

Thus, there is a clear tension between those who defend and recognize that EDS is an alternative to centralizing Basic Education focused on practical training, which favors exchanges of knowledge, attitudes, values, and perspectives of lifelong training, seeking to reorient training programs (from early childhood education to higher education) towards training that transfers knowledge aimed at sustainability, in the interest of community education, as a stance to be adopted by signatory countries, in their Action Plans (UNESCO, 2005), and those who consider ESD as an expression of a neoliberal policy with intentions of a project associated with capitalism and which, in tension with environmental education, can assume different roles, as demonstrated by research by the International Commission of Education and Communication at the International Union for Conservation and Nature (IUCN):

EDS as a subfield of EA, like the metaphor of a tree, where the roots and trunk of EA support other dimensions such as Agenda 21, Earth Charter, Ecopedagogy and EDS b) EDS as a gradual evolution of EA, with an initial milestone and final in a straight line, through the figurative scenario of the Darwinian line, with considerable advances in the "evolved EDS" and the abandonment of the "primitive EA" c) The complementarity of the two distinct fields, each with their own epistemic frameworks, concepts and

theories; of its tactics, strategies and praxiology; and its political, ethical and axiological commitments (HESSELINK; VAN KEMPEN; WALS, 2000 apud MEIRA; SATO, 2005, p. 11, our translation).

Given the importance of demystifying these roles assumed by EDS, this study aims to understand their nuances, using, as a counterpoint, the EAP perspective, recognized as one of the expressions of the macrotrend of Critical Environmental Education (LAYRARGUES; LIMA, 2014; SOUZA, 2018; ALVES PEREIRA; SILVA; RAMÍREZ-SÁNCHEZ, 2022). Therefore, we are interested in knowing what is the perception of environmental researchers from Brazil and Mexico about ESD, in relation to their social project, its presence or not in the National Education Plans, and the possible tension with the EAP perspective.

We start from the hypothesis that understanding these movements to demystify their intentions can greatly contribute to those teachers who are in their educational contexts and, often, receive the policy already with its addresses. We consider that the perspective of these environmental educators plays a formative role in times of a broad civilizational crisis, being able to expand the meaning that ESD has taken on in different spaces.

Conceptual demarcations

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The main guidelines on ESD are present in the document Decade of Education for Sustainable Development (DEDS), from UNESCO (United Nations Educational, Scientific, and Cultural Organization), but specifically in the International Implementation Plan, published in 2005, and lasting until 2014. It arises with the aim of providing all citizens with the capacity and conditions to face the present and the future. This is associated with the demand for leaders' ability to make correct decisions for a viable world.

The global objective of the Decade is to integrate the values inherent to sustainable development in all aspects of learning with the aim of fostering changes in behavior that allow the creation of a sustainable and fairer society for all (UNESCO, 2005, p. 15, our translation).

It is based on the premise of the evolution of the concept of sustainable development, which recognizes, as a priority, the role of society in driving change and participation in the search for social development, the environment, and ecological awareness in the guidance of all policies and the economy. Regarding the awareness of the limits of growth that guides development, the horizon that is unfolding is based on the defense of a world vision where education must reach everyone in the direction of learning values and behaviors for a

sustainable world, the based on the objectives of: valuing and recognizing the role of learning, creating exchange networks between the parties involved, creating opportunities for training and improvement, improving the quality of teaching and developing strategies at all levels, aiming to strengthen the capacity of individuals to direct from EDS (UNESCO, 2005).

Concerned with achieving this societal project, EDS recognizes itself as a proposal that should contribute to everyone, with the adoption "of practical attitudes that will allow everyone to live a full life, without lacking the essentials" (UNESCO, 2005, p. 18). To achieve this broad objective, UNESCO proposes quality education that must be interdisciplinary and holistic, seek to acquire values, develop critical thinking aimed at solving problems, focus on a multiplicity of methods, encourage participation in decision-making, be applicable and related to local life (UNESCO, 2005).

This outline of EDS, as a society project, is linked to other major movements within multilateral bodies. In this sense, it gains strength and can be seen in relation to the Millennium Development Goals, Education for All and the United Nations Literacy Decade. Therefore, in this relationship, it is essential to think about ESD to understand how much its discourse is already present in documents and planning of educational proposals in most countries, especially in Latin America.

Another important aspect present in reading the DEDS refers to the understanding of the space and role of Environmental Education from the perspective of UNESCO.

Education for sustainable development should not be equated with environmental education. Environmental education is a well-established discipline that emphasizes the relationship between men and the natural environment, ways to conserve it, preserve it and manage its resources appropriately. Therefore, sustainable development encompasses environmental education, placing it in the broader context of sociocultural factors and sociopolitical issues of equality, poverty, democracy and quality of life (UNESCO, 2005, p. 46, our translation).

In our understanding, as a globalizing project, EDS seeks to mitigate Environmental Education in order to define its space, at the same time as it seeks to escape the tension that favors demonstrating the weaknesses of its own horizon.

If we take as a reference the National Education Plan (PNE), 2014-2024, Law no. 13,005, of June 25, 2014, we see an adjustment adjusted to the EDS speech, when it advocates "promoting the principles of respect for human rights, diversity, and socio-environmental sustainability" (BRASIL, 2014, p. 2). However, we recognize that the perspective is also present in the main guidelines of the PNE, as can be seen in the aspects of education for all, the

eradication of illiteracy, the confrontation of inequalities, the discourse on quality in education, the emphasis on the formation of citizenship and values, gender equity and diversity, and environmental sustainability:

Art. 2 The PNE guidelines are

I-Eradicate illiteracy;

II - Universalize school attendance;

III - overcoming *educational inequalities*, with an emphasis on promoting citizenship and eradicating all forms of discrimination;

IV – Improve the *quality of teaching*;

V - Training for work and citizenship, with an emphasis on the moral and ethical values on which society is based;

VI - Promotion of the principle of *democratic management* of public education;

VII - humanistic, scientific, cultural and technological promotion of the country;

VIII - establishment of a target for the application of public resources in *education as a proportion of the Gross Domestic Product - GDP*, which guarantees that expansion needs are met, with standards of *quality and equity*; IX – Valuing education professionals;

X - Promotion of the *principles of respect for human rights, diversity and socio-environmental sustainability* (BRASIL, 2014, emphasis added, our translation).

On a practical level, these guidelines have broad implications for everyday school issues, being able to redefine notions of physical space, school management and, fundamentally, the curriculum. It is through this horizon, for example, that sustainable schools are envisioned (OLIVEIRA; OLIVEIRA; CARVALHO, 2021).

Seeking to evaluate the scope of the DEDS, the study by Uchoa (2018) makes a critical analysis of the document in light of Paulo Freire's Pedagogy of Autonomy. In her critique, the author points to some limitations of EDS when referring to the search for quality training for the development of critical thinking, but it contradicts itself in its objectives due to its epistemological fragility:

The proposal for a critical dimension in ESD, in addition to not being epistemologically based, is nullified by a dimension that opposes education from a critical perspective, in passages of the text that, despite suggesting a transformative education, do not problematize its own premises (UCHOA, 2018, p. 343, our translation).

Another contradiction in the search for training in critical thinking lies in its alliance with the capitalist system, taking a clear position in favor of the market and, therefore, escaping an emancipatory critical perspective:

Education itself is part of a broader economic system and is influenced by patterns of supply and demand, levels of taxation and other economic forces, which also function as regulators of the environment. For ESD to find its way into educational offerings that respond to market forces, it becomes important to influence the norms and functioning of the market (UNESCO, 2005, p. 56, our translation).

In addition to this aspect, the article by Uchoa (2018) warns of other weaknesses of an education that is assumed to be commodified, guided by a notion of creativity without criticism, not contributing to the reading of the world, due to the lack of a historical achievement of the present time, by the search for a future removed from concrete realities and by assuming an instrumentalist perspective of education, as if educating were transferring knowledge. Another aspect concerns the fact that, in it, sustainability is seen as content to be taught as standards, which, in the author's understanding, consists of a legacy of a banking and colonizing conception of education. All of this can lead people to the condition of environmental oppressed, whose previous choices emerge from a multilateral agency. The biggest challenge comes down to breaking with this condition of colonizing banking education, because, in his understanding, the document does not account for the broad environmental crisis that we are experiencing. In this sense, it suggests Critical Environmental Education as an instrument for transformation in this process (UCHOA, 2018).

For all these reasons, the (EAP) is an anti-systemic (EA) and always evaluates collective contexts and practices. It contributes to thinking about another social model for Brazil and the world. Thus, it refers to an (EA) that does not believe in the false reconciliation between capital and the environmental agenda. On the contrary, it develops critical training in all spaces, reinforcing social protagonism and the construction of projects with social intervention and forms of community and cooperative organization. Therefore, it is an (EA) that transcends the green agenda at the service of the market, going beyond the logic of adaptation (ALVES PEREIRA; SILVA; RAMÍREZ-SÁNCHEZ, 2022, p. 103, our translation).

An important study by Alonso-Sainz (2021) on ESD, in Spain, evaluated 34 articles, between 2015-2019, and found that 62% were more focused on describing and stimulating the implementation of ESD and presented weaknesses in the educational framework of the SDGs. This means recognizing a fragile debate about the purposes of education. The study demonstrates a greater concern with adjustments for implementation, considering, in this process, that Education is at the service of the SDGs and not the other way around. In this way, the lack of criticality in the pedagogical field, associated with the proposal of education for the future, may be emptying the epistemological debate. The study considers that, because the discourse emerges from an international organization, and not from academia, it favors this

emptying. Furthermore, there is another appeal of EDS due to its link with financing, especially in universities, where criticality is even more fragile, as it is placed on the agenda in different notices. This also occurs in the financing of basic education in developing countries, which depend on this investment. This, likewise, is the European Commission's project when it aims that, by 2027, sustainability will be the major guiding framework for research financing.

And that, in reality, the SDGs are *soft policy*, that is, a soft policy of an operative nature, whose level of achievement reaches standards of measurable and evaluable achievement, which reduces the possibility of civic debate, so only the mayor or the smallest quantitative fulfillment, but not a qualitative debate about its meaning and educational reach (ALONSO-SAINZ, 2021, p. 254, our translation).

The alternative suggested by the author highlights the need for the SDGs to be rethought in the service of education, instead of reducing them to instruments to achieve objectives favorable to a future society (ALONSO-SAINZ, 2021).

In the case of Mexico, Ruiz (2020) takes stock of how ESD is incorporated into government plans, programs and projects at the municipal, federal and state levels. In this sense, it recognizes that the incorporation of the EDS, in the government's guiding documents, is a criterion to measure the level of depth and engagement of the proposal. The study finds that, in the National Development Plan (2007-2012), there is an explicit mention of Environmental Education for Sustainability. Furthermore, it is recognized that state plans have always been ready to implement Federal Plans. However, it is imperative to mention that:

In contrast to such a presence of the EAS in the PND, in the sectoral education program for this period there is practically no mention of this, despite the fact that it largely coincides with the years of duration of the DEDS (RUIZ, 2020, p. 16, our translation).

The same fact does not occur in the context of the National Environment Program, which makes references to the needs of educational processes from the perspective of sustainable human development. Also noteworthy is the increased inclusion of ESD in the public sector, but the results are not yet relevant, as they imply aspects of government order and the creation of policies that can support and invest in government action plans. (RUIZ, 2020).

Still with the purpose of evaluating Environmental Education for Sustainability, in another study carried out in Mexico by Ruiz, Rosales (2017) heard 24 states of the Republic and 53 organizations, 27 governmental, 14 academic and 12 civil, which contributed to the assessment of the objectives of the *Decênio de la Educación para el Desarrollo Sostenible* (DEDS) document, which began on January 1, 2005 and concluded in December 2014. The

study is important for having carried out an assessment of the document, reaching conclusions that indicate movements and expressions of EDS in the case of Mexico. As a result, it was found that there is no consensus among environmental educators regarding the (DEDS). On the contrary, what exists is a great controversy.

There is a position, as we have already seen, that assumes that the Decade generated influences, direct or indirect, in the educational actions of the country, which are considered to be able to be enunciated punctually. They point out that this was an opportunity to argue the importance of education linked to the environment and open spaces for institutional recognition and consequently financial resources. In contrast, there is another position that states that the DESD belonged only to the fields of discourse and that, therefore, there was no significant influence, especially outside official circles and that in the activities carried out a greater articulation between social actors was not achieved, nor did they generate, after a certain initial but very atomized impulse, greater permanence or constancy of educational programs or actions, nor were these evaluated or followed up by the authorities. Some of those who embrace this position emphasize that the influence of Latin American educational thought has been more powerful (JUDGE; ROSALES, 2017, p. 07, our translation).

The lack of a consistent evaluation model is highlighted as one of the major gaps that prevented the proposal from being successful, as it is difficult to measure the results. Likewise, the research subjects indicate that there were difficulties in the perspective of teachers evaluating their own practice and demand a deeper evaluation. In this sense, they also complain about the lack of specific investment in training for teachers. Added to this is the observation that there were no impacts on culture due to the context, which requires a strong and critical stance on the roots of the civilizational crisis. And, in the subjects' understanding, this involves directly confronting the agro-industrial model, especially the logic that drives this mode of production, governed by neoliberal policies. In this way, they consider that there was no effective transformation in the contexts, especially when they proposed to resolve poverty and protect ecosystems.

It is in this sense that the Decenio de la Educación para el Desarrollo Sustenible has not been a relevant engine of transformation, despite the fact that it has allowed some achievements and achievements to be achieved that cannot be underestimated. From the perspective of the environmental educators participating in this study, the opinion predominates that the DEDS did not favor, in part due to deficiencies in the planning of its managers, in a notable way the development of environmental education in Mexico, but is continuing to advance and diversify its reaches (RUIZ; ROSALES, 2017, p. 09, our translation).

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This evaluative movement recognizes the openness and richness of the diversity of themes and intersubjective experiences in the context of the DEDS. Furthermore, this data indicates the need for a clear national policy regarding Environmental Education for Sustainability. Another aggravating factor, according to the evaluation, was the fact that because it was designed by an international organization, the DEDS often did not consider advances in local experiences and practices. In terms of thematic perspectives, they consider that Mexico is going through a good moment. However, the lack of public policies and lack of investment create situations of uncertainty and insecurity (JUIZ; ROSALES, 2017).

In Brazil, more recent assessments focus on ESD in the context of the 2030 Agenda, in which it assumes the role of a major driver in the direction of the Project for a society for a sustainable world.

> The Education 2030 agenda, disseminated by UNESCO (2015), brings with it a new cycle of deschooling, even though it maintains the slogan of inclusive education, articulating lifelong learning, which presupposes diffuse learning with extended dimensions in relation to life practical and everyday, moving away from a process of appropriation of scientific knowledge related to schooling processes (GARCIA; MICHELS, 2021, p. 16, our translation).

In the same direction, there is an understanding that EDS tries to become attractive when it seeks to bring managerialism and sustainability closer together, taking advantage of very expensive themes and principles with historical struggles, among which the field of rights to education, participation and inclusion. Therefore, there is a strong denunciation of EDS and its strategies in the context of the 2030 agenda:

> The 2030 Agenda does not deny poverty, deforestation, predatory extractivism and depletion of natural resources, but presents sustainability as a vector for growth (SHIROMA; ZANARDINI, 2020, p. 711, our translation).

Even though in the DEDS there is an indication that ESD cannot be placed in a comparative mode with Environmental Education, with the desire to deepen this debate, our study seeks to understand the perceptions of educators about the discursive and practical place they are assuming, and it is no longer possible to deny that:

> Given all this, one thing is certain. The dispute between EA and EDS will continue to occur and the fields where it will take place will also continue to be academic and pedagogical spaces. It will continue to be present in schools, universities, working groups of national research associations, in articles in scientific journals, in other spaces for scientific dissemination, literacy and literacy; as well as teacher training, undergraduate courses, for example (HENNING; FERRARO, 2022, p. 13, our translation).

We carry out this movement by understanding the project of Popular Environmental Education as a counterpoint to the colonizing, globalist and market logic with points of departure and arrival, and the defense of a project for a society very different from that proposed by EDS. Whether this premise holds up or not is what we will realize from the ongoing listening to our interviewees.

Methodological Approach

The study is based on a qualitative approach, recognizing that this perspective,

[...] answers very particular questions. It is concerned, in the social sciences, with a level of reality that cannot be quantified. In other words, it works with the universe of meanings, motives, aspirations, beliefs, values and attitudes, which corresponds to a deeper space of relationships, processes and phenomena that cannot be reduced to the operationalization of variables (MINAYO, 2011, p. 22, our translation).

We associate with it the approach of Gadamer's Philosophical Hermeneutics (2002), which contributes, in a decisive way, to the expansion of meanings in the processes of understanding and interpreting texts and contexts mediated by dialogue and guided by language, which creates possibilities for new readings of the world and the human action implemented in it. In this sense, the movements carried out in hermeneutic listening always privilege multiple dialogical possibilities, in which dialogue goes far beyond speech and can be recognized in countless humanity-world relationships.

It was from this perspective of searching for perceptions and meaning that, during the research, we interviewed 10 (ten) Environmental Educators, 5 Brazilians, 2 women and 3 men, and 5 Mexicans, 3 women and 2 men. The criteria for choosing the interviewees was that they be researchers in EA, who had knowledge of Environmental Education policies, worked in Postgraduate Programs and whose lines of research were a reference in Environmental Education in both countries.

The research technique used was the in-depth interview modality, which consists of one of the procedures suitable for qualitative research and, unlike the quantitative interview, consists only of open questions, which were applied individually, which allow a freer expression of the interviewed (MINAYO, 2011). We prepared an open question asking that, based on experience and experience in the environmental field, we would like to know the researcher's opinion on ESD, being able to consider, if so desired, its principles, requirements of transformations in

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educational processes, in curricula, in the teaching profile, in education for integrative skills, in sustainability, in creativity, in critical and innovative thinking, in identifying and solving problems and in human action for Sustainable Development. Likewise, we asked for their perception of the EDS discourse, asking whether the interviewee considers it to be present or not in the National Education Plan and whether or not they perceive its arrival among Basic Education teachers. The last question dealt with the possible relationship between EDS and EAP.

The referrals were made via email, and, firstly, we sent an invitation letter explaining that it was a post-doctoral study, in which we also introduced the professor supervising the research and the main motivations for the investigation. After receiving acceptance of the invitation, we also sent, via email, a Free and Informed Consent Form – TCLE, which was received and signed by everyone, with permission to publish the results, including their first names. The researchers had 20 (twenty) days to respond and, during this period, the 10 questionnaires sent were returned, with a sample of 5 from Brazil and 5 from Mexico. The collection took place at the end of the first semester of 2023. Thus, the results that follow seek to translate the hermeneutical-qualitative movements, in order to expand the understanding of ESD and EAP as Education projects in Latin America, especially in Brazil and Mexico.

Results

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Perception about Education for Sustainable Development

From Brazilian researchers

According to Dr. Philippe Pomier Layrargues, there is a clear space occupied by EDS, whose links can be seen in the commitments and power relations it assumes in the context of capitalism and global geopolitics:

The EDS is linked to the political-economic elites that orbit the sphere of the United Nations that aim to ensure capitalist hegemony in global geopolitics, and the so-called green capitalism and its alleged circular economy disguised as "Sustainable Development" ethically oriented and empathetic interest for generations future ones (LAYRARGUES, 2023, our translation).

Navigating in this same direction, Dr. Maria Arlete Rosa reaffirms her position based on Critical Environmental Education, in which she seeks to transform the capitalist political-ideological model and recognizes the space that EDS has been assuming, as reveal his words:

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Thus, I consider that EDS is aligned with the social field of a conservative and pragmatic ideological political project in the focus of the studies by Layrargues and Lima (2014, p. 23-40) when systematizing "the political-pedagogical macrotrends of Brazilian environmental education". It reproduces an anthropocentric paradigm based on the political, economic, social and sustainability structures of the current model of capitalism, in which nature is an object of the market to obtain profits. In this context, we find the Sustainable Development Goals – SDGs, which seek to reproduce the sustainability of the capitalist model of development and conservative and pragmatic EA (ROSA, 2023, our translation).

Another important contribution comes from Researcher Marilena Loureiro da Silva, who, in her position, has a firm epistemic and political demarcation when she states:

We end up distancing ourselves from this concept of Education for Sustainable Development, despite the UN's recommendations, as we understand that it ends up being imprisoned by the interests of a hegemonic class that will appropriate the understanding of sustainability and translate the light of hegemonic interests (DA SILVA, 2023, our translation).

Even considering that ESD is a topic outside of his approaches, Dr. Ivo Dickmann, defender of a Freirean Environmental Education, presents some suspicions regarding it:

I believe that there are some limits in the name itself, as it brings the issue of development – a polysemic theme – connected to the idea of sustainability, which is just as polysemic. In short, I believe that it does not carry the criticality necessary for the environmental debate, treating central problems and issues in a manner aligned with the Market, but at the same time, I don't know for sure if there is a hegemonic aspect on the topic and other dissonant currents (DICKMANN, 2023, our translation).

Still on the challenge of facing ESD and the SDGs, the researcher warns that:

Thinking about development in a sustainable way is the right decision, the question is whether by proposing this we are talking about breaking with the capitalist system, which is unsustainable, among other issues. (DICKMANN, 2023, our translation).

Presenting a series of conceptual and historical elements, as well as Dr. Maria Arlete Rosa, and positioning herself based on a critical and participatory Environmental Education, developed in Brazil, Latin America and Mexico, by Edgar Gaudiano, which goes far beyond the discourses and practices, both of the so-called EDS and with a series of SDGs, Dr. Antônio Fernando Silveira Guerra draws attention to previous studies by renowned thinkers in Environmental Education that demonstrate that ESD is not a fashionable topic.

Therefore, this "conceptual" discussion about $EA \times EADS$, sustainability x sustainable development, has been going on since the last century and

millennium, and many authors in the country (such as Michele Sato, Mauro Guimarães, Marcos Sorrentino, Philppe Layrargues Isabel Carvalho, and others); in Galicia (Pablo Meira), in Mexico (Edgar Gaudiano), Canada (Lucie Sauvé), they developed works criticizing and exposing the philosophical and ideological epistemological contradictions of the discourses, both of the Decade and of the EDS, and more recently of the SDGs (GUERRA, 2023, our translation).

In addition to recognizing an agenda whose historical roots are already well defined in the field of EA, the researcher draws attention to attempts to replace Environmental Education with Education for Sustainable Development:

In this sense, the so-called ESD emerged with the Decade (2005-2014) of "Education for Sustainable Development (EDS)", by UNESCO, with the intention of replacing Environmental Education, and to this end it tried and still tries, to appropriate its history, principles and Values, in this case those that concern the hegemony of economic power in the world (GUERRA, 2023, our translation).

From the Perception of Mexican Environmental Education Researchers

All Mexican researchers recover historical, epistemological, political and pedagogical aspects. This is the case, for example, of Dr. Raul Calixto Flores, who views ESD in the broad set of International Policies, its links with international organizations and the consequences of this perspective on national policies, as is the case in Mexico. This researcher, in conceptual terms, takes as a reference the typification of Eduardo Gudynas (the attention to the limitations of EDS, if taken from the perspective merely focused on economic growth and well-being: Desde mi opinión, la educación 2009), in which observes three types of sustainability: weak, strong and super strong. It also considers that "the development coincides with weak sustainability, which is among other concerns that conservation is necessary for economic growth and prosperity" (CALIXTO, 2023).

Still on the perspective of historical and conceptual demarcation, Dr. Esperanza Terrón Amigón states that ESD is not a fashionable topic, but on the contrary, suggests that we return to the debates that began in the 60s and 70s, considering the birthplace of both Environmental Education and Education for Sustainable Development. Like Dr. Calixto, the researcher draws our attention to the fact that thinking about these movements in relation to Environmental Education presupposes that we are clear about the existence of a project from the north and a project from the south. As for the northern project, it considers: "the first lineal and hierarchical with economicist fines tending to universalize nature as a commodity" (AMIGÓN, 2023). Still regarding the objectives of this proposal from the North, the researcher warns us:

In this Summit, this is where Sustainable Development was adopted as a new paradigm, and with Education for sustainable development, the intention was to replace Environmental Education, which in Latin America did not prosper, but continues to attempt from the top, from the West to show that we have there Agenda 2030 for sustainable development, whose responsibility for solving environmental problems is left to civil society (AMIGÓN, 2023, our translation).

Demonstrating the difficulties in achieving these objectives, Dr. Francisco Javier Reyes Ruiz and Dr. Elba Castro Rosales have dedicated themselves to research evaluating the scope of these proposals in Mexico, reaching the following conclusion:

Today it is possible to affirm that the efforts carried out in the last few decades have achieved the manifest acceptance of integrating the EAS into the country's institutional system, even with marked hurdles. The effort has not been little, if it is considered that it has involved complex issues such as the creation of government agencies, the formulation of corrective documents, the management of resources and the development of programs that have sought, from an educational position, to enrich environmental actions of government plans (RUIZ; ROSALES, 2023, our translation).

Situating EDS from its historical perspective within the set of international policies, Dr. Mariana Buendia presents some movements that took place in Mexico, based on thinkers such as Edgar Gaudiano and Esperanza Terrón, and their contributions to this debate and to the country's policies. It assumes an important position regarding the need for preparation and knowledge of the fundamentals surrounding this topic, at the risk of remaining on shallow ground:

In other words, it is necessary to understand the context and define the guidelines that will guide future decisions based on the objectives that are intended to be achieved and the purposes and impact of the intervention. In the same way as above, there is a risk of reproducing naive, instrumental and short-range proposals, which very little serve the good will, do not nourish the EAS field and much less support the construction of sustainability (BUENDIA, 2023, our translation).

It is important to highlight that both Brazilian and Mexican researchers have a clear notion of ESD, its links and commitments with multilateral agencies, as well as with the economic policies of the neoliberal capitalism project that links sustainability to the market. How ESD is being seen in relation to educational proposals and policies is what we will see below.

From Education for Development in National Education Plans and Basic Education

When asked about the perception of the arrival of this discourse in the National Education Plans, as well as in Basic Education, the assessments are somewhat different. In Brazil, there are those who do not see its presence in the PNE, but in other documents, however, in schools: "It is observed that ESD as well as the Millennium Goals are present in schools and environmental departments with vigor" (LAYRARGUES, 2023, our translation). Another researcher considers that the gateway to EDS is through universities:

[...] both the EA and EDS discourses are fighting a battle for hegemony in the field in the country, so much so that even though the SDGs are not incorporated into the current National Environmental Education Policy and Program, they entered the country through the "back door" of universities, through deanships, and even in public and private financing projects, and today they have become a requirement criterion for the approval of research and innovation projects, which must include which SDGs they refer to (GUERRA, 2023, our translation).

Among the spaces for approaching this discourse in Basic Education, three experiences are presented in Brazil, which arrived in the early 2000s, through some teacher training policies that occurred punctually, provided by the Secretariat of Diversity and Inclusion-SECADI: "in Environmental Education and Sustainable Schools courses; Improvement Course in Environmental Education; Specialization in Environmental Education in Sustainable Educator Spaces" (DA SILVA, 2023, our translation).

Based on years of research experience on EA in Teacher Training Policies in Brazil and the article "Current public policies in Brazil: the silence of environmental education", by Frisso and Carvalho (2018), another researcher reaches the following conclusion:

School EE is punctual, fragmented, disjointed, and is not present in school management. When analyzing school documents such as Pedagogical Political Project/Teaching Plans/Class Plans/Course Plans/School Regulations, EA is not mentioned (ROSA, 2023, our translation).

Given such fragility of school EE, as well as its invisibility, the researcher calls for training policies for education professionals. The lack of perception of its presence in the PNE and the reach of EDS in Brazilian Basic Education is also highlighted in the following statement: "[...] I do not see these aspects present in the PNE and my research in the school environment has demonstrated that educators from the base of education have no idea that the scenario carries this implicit complexity" (DICKMANN, 2023, our translation).

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Regarding perception, in the context of Mexico, it is important to highlight that due to a great training and collective effort that began in 2005, a movement was chosen in which Environmental Education for Sustainability (EAS) was chosen as terminology. This is not just a play on words, but about guaranteeing EA's space and reorienting the issue of Sustainability in this relationship, as we see: "No se considera a la education for him develop sustainable, there sustainability is observed as an attribute of environmental education for sustainability" (FLORES, 2023, our translation). The researcher comments that, currently (2022-2023), Mexico is undergoing an educational reform towards a "New Mexican School", in which

[...] environmental education is excluded, and instead an education for environmental care is proposed, and is used as adjectives and in an indistinct sustainable and sustainable way. With the new reform, new plans for environmental education are being planned. However, in the General Education Law (2021), in articles 15, 16 and 30, sustainable development is explicitly alluded to (FLORES, 2023, our translation).

In their assessment, Elba Castro Rosales and Javier Reyes Ruiz offer us important contributions on EA and ESD in Mexican Education. As already pointed out, they consider some weaknesses, declaring that EA is not widely integrated into policies and practices:

However, planning for development in the country does not place EAS as a priority topic. On the concrete ground, there is not enough legislative and normative relevance to be able to establish outstanding guidelines. A very poor concept predominates that supports environmental education as well as a list of tools for dissemination, awareness or training (RUIZ; ROSALES, 2023, our translation).

And yet:

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[...] the Center for Education and Capacity for the Sustainable Development of the Secretariat of Environment and Natural Resources (SEMARNAT), has meant an important setback that the current federal administration was expected to resolve, but it is a long way from being so (RUIZ; ROSALES, 2023, our translation).

Furthermore, other weaknesses are highlighted by researchers, such as: a) the failure to achieve mainstreaming of EA in government plans; b) the abandonment of public policies, from government bodies to isolated experiences; c) the lack of funding for EA research; d) the need for studies to quantify investment in EA in the country; e) incompatibility between investment policies and operation manuals and procedures of a multilateral nature; f) the role of the State which, in many cases, in addition to not supporting, hinders the strengthening of social actors, with a certain fear in relation to organized civil society (RUIZ; ROSALES, 2023).

This scenario requires some substantial changes towards EDS. For this to be effective and relevant, it must be based on ethical principles in defense of life. However, despite many efforts, this perspective has not yet been achieved in Basic Education:

The demands for transformations in educational processes, if they have been given and can be found in the discourses of curricular plans in cases of basic education for both students and teachers, but have not really been able to influence the construction of a thought systemic and in a change with critical consciousness, attitudes and lasting values, because they are among the limitations that no training has been given in this field to teachers; On the other hand, neither the complexity nor the systemic vision has been able to be shaped in the contents or educational materials that teachers receive for the study of serious environmental problems in text books (AMIGÓN, 2023, our translation).

In this researcher's opinion, advances towards sustainability, from a critical and innovative perspective, are successful in the context of postgraduate programs at universities. For another interviewee, the links with external policies must be recognized, as well as pointing out that the recognition of the field of Environmental Education for Sustainability (EAS) is still in the making. In this sense, he considers that there is much to be done in changing the paradigm for EAS. This researcher also shares the list of difficulties that hinder EAS in Basic Education, with one of the main problems being associated with teacher training, based on a conservationist bias that fragments and disarticulates the environment and sustainability. The researcher calls for critical, problematizing training in confronting problems. Furthermore, it denounces the space given to environmental themes and sustainability in the school curriculum:

The lack of interest in environmental and sustainability issues on the part of teachers and the lack of recognition about their importance is another factor that has prevented the consolidation of environmental education in the school environment. Since the initial training of teachers, environmental education has been in the background, often considered (OLIVA, 2023, our translation).

From the above, it is possible to perceive a significant epistemological advance in the discussion of ESD in Mexico in relation to Brazil. However, both face similar problems, one of the biggest obstacles being the lack of a training policy for environmental educators.

The differences or confluences between EDS and EAP.

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The results indicate that only two interviewees do not explicitly recognize the differences in projects. All the others identify the horizon of Popular Environmental Education as a critical Latin American horizon, thought of from the identity and problems of the South,

and EDS as a North-oriented project, associated with neoliberal policies and multilateral agencies, being the UNESCO is the main one. It was reinforced that this is not a naive discourse with false similarities, but with great political differences:

At first, with a superficial and introductory look at the topic, it would be possible to understand ESD as well as EA Popular as synonyms, as parallel educational practices focused on the environment. However, adopting a critical look from the perspective of ideological power relations, the picture appears very different [...]. EA Popular, as the name itself informs, revolves around the popular classes and traditional Latin American peoples. There is clearly a social class divide present in this nomenclatural dispute in the name of defending nature, whose agendas and subjects of the educational process are diametrically opposed [...]. EA Popular transgresses the rules of an obedient, submissive and exploited society, brings into play cases of injustice, conflict, racism and socio-environmental inequality, and forms political subjects capable of claiming their rights that have been taken away or denied (LAYRARGUES, 2023, our translation).

Here I point out that we have two political/ideological pedagogical projects that are organized in the field of EA conceptions. A conservative/pragmatic field — Education for Sustainable Development and another critical/emancipatory field in the line of social transformation that produce a social practice in this field of intentions (ROSA, 2023, our translation).

Although I am not a supporter of these separatist logics, but of the search for complementarity, in this specific case, I think they are completely opposite matrices [...] a logic more adherent to simple functional adjustments of the collapsed system that is ours represented by the EDS [...] and Popular Environmental Education, which stands as this field of resistance and construction of another perspective of thinking about life [...] very politically positioned (DA SILVA, our translation).

Education for sustainable development and popular environmental education has coincidences, but also differences of origin that must be taken into account when one wishes to take a stance in reflective and critical practice (FLORES, our translation).

As for possible convergences, these are indicated when interviewees bring Environmental Education for Sustainability closer to Popular Environmental Education. In this case, there are records of good practices and a possible merger of horizons in Mexico, mainly in non-formal education spaces (RUIZ; ROSALES, 2023). It is also possible to establish convergences between the horizon of Latin American Environmental Education and Popular Environmental Education, according to Amigón (2023). Another researcher establishes this difference in projects, taking Ecopedagogy as a reference: "I do believe that the popular dimension of Environmental Education is similar and comes closer to the ecopedagogical

approach, as it treats socio-environmental aspects in a deeply critical way, in addition to acting with the thought Freirian as central" (DICKMANN, 2023, our translation).

Final remarks

The research presented results with insights from leading researchers in Environmental Education in Brazil and Mexico. The perceptions point to the limitations of Education for Sustainable Development in fulfilling its objectives, with regard to the emancipation of subjects. Furthermore, the links between EDS and neoliberal capitalist policies were demonstrated, which do not promote profound transformations in the defense of life. It was reinforced that the horizon of Popular Environmental Education, with its emergence in Southern thought, seeks to guide training processes towards the emancipation and humanization of subjects.

However, the experiences of Brazil and Mexico reveal the lack of consistent policies aimed at the environmental training of teachers. Currently, in their National Education Plans, both countries focus more on Education for Sustainable Development than on Popular Environmental Education. In Mexico, there is progress in adopting Environmental Education for Sustainability in order to guarantee the space for Environmental Education. The absence of this debate in basic education, not in the sense of polarization, but in the search for transformation, was one of the points highlighted as limiting progress in the area. The study reinforces the great fragility in Basic Education, sometimes demarcated by external policy addresses, sometimes by the lack of specific training.

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OLIVA, M. B. Researcher in Environmental Education in Mexico. Universidad Autónoma de San Luis Potosí, San Luis Potosí, 2023.

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