

EDUCATION, PUBLIC AWARENESS AND TRAINING PROCESSES FOR SUSTAINABILITY IN BRAZIL: FROM HISTORY TO PERSPECTIVES

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Summary

The diversity of the range of training actions directed towards sustainability in Brazil is reflected in the diversity of sectors in society that are dedicated to these actions, and to

the enormous diversity of objectives and methodologies. Educational institutions, government agencies, private enterprise, the media, NGOs and social movement organizations have been incorporating rhetoric and practices of management and training of environmental importance. The pulverization, lack of dialog and mutual contesting between the thousands of individuals related to these processes makes it difficult to have any unanimity, in society, as to the nature of the idea of sustainability. The origin of this state is in the abysmal distance between the different political interests and positions, even though they all take cover under the same sustainability mantra. This term, apparently capable of amalgamating contradictory interests in Brazil, can be analyzed under two perspectives, a positive one that recognizes a transforming movement, and another more critical one that fears embarrassment in expressing the real conflicts, which, if worked on dialectically, could in fact promote an effective transformation, a permanent necessity in the most unequal country among the world's great economies.

1. Introduction

A strong characteristic of Brazil is its multiplicity of cultures, people, environments, biomes and social-political-economic conditions that create a diversity of socio-environmental relations and of educational processes involving such relations. This chapter intends to present a circumstantial analysis of the educational reality regarding the environmental issue in the country, emphasizing its dynamics, multifaceted and colorful character—more of a kaleidoscope than a photograph.

In search of achieving such objectives, a paper was organized presenting characteristics of the educational initiatives that sought sustainability among the different sectors of society, in this case the Formal Educational Spaces, the Means of Communication, Private Enterprise, the NGOs and the Social Movements, and the Government Agencies. For each of these sectors the text seeks to approach, in a brief manner, the past (the history), the present (state of the art) and the future (the perspectives). In trying to make this kaleidoscope as representative as possible, the text brings examples from various regions, from cities, from rural areas, from the suburbs, the coast and the interior of the states.

As a general view, it is fit to point out some aspects of the “education, public awareness and training directed toward sustainability” in the country, which can be found in the very different sectors of society, regions and population groups:

1) The *popularization of the environmental issue*, today, can be seen by the use of terms such as *ecology* and *preservation* in the everyday speech of people, of government agencies, of businesses, educational institutions and NGOs, which before were distant from the issue.

The creation of environmental programs and projects by the most diverse sectors is an example of the amplitude reached by the debate on environmental questions. Maybe the strongest aspect resulting from this popularization is the appearance of an informal educational process founded on the “ecologically correct” concept that becomes effective, also as pressure on daily attitudes, such as littering, water and energy waste,

use of wood from threatened species, indiscriminate use of automobiles.

However, it is common to notice that such changes in thought can be found side by side, within the same institution, social group, or even, within the same person with contradictory actions, resulting in not overcoming socio-environmental problems and the consequent degradation of the natural systems and quality of life.

The deforestation of the Amazon has remained above 15 000 squared kilometers per year; the emissions of carbon dioxide rose 25.1% between 1990 and 1996; the production of garbage per capita has grown; soil loss through erosion has provoked rising silting of the water courses; the use of chemical products in agriculture, without sufficient precautions, has contributed to the toxification in the field and the contamination of products. In the state of Acre, at the same time that the State government adopts the slogan “Forest Government” as well as a marketing strategy seeking to strengthen the identity of the population with the Amazon forest, a Federal Deputy from that state said on television that he considered it “an absurdity for the government to be concerned about trees, Indians and animals, it should be concerned with people”.

According to a survey carried out by the Ministry of Environment in 1997, deforestation and water resource contamination are the most important environmental problems for Brazilians—46% of those interviewed know concepts such as the greenhouse effect, and 21% know the meaning of biodiversity loss, 54% believe in the need to control oil consumption levels and most do not agree with the statement that Brazil does not need to control the exploitation of natural resources because it is a nature-rich country.

2) *Diversity* of environmental education actions—maybe its most expressive feature—is noticed from its ideological orientation, origins, motivations, objectives, methods, techniques, contents, partnerships, financial support, results, degree of institutionalization, and professional background of the educators involved as shown in the survey taken by the Ministry of Environment, during the 1st National Conference on Environmental Education.

The motivations that lead to environmental speeches and practices are multiple, among them is *fashion*, pressure by legislation/monitoring, environmental conditions established by financing agencies (national and international, public and private) and to promoting “development”, involvement motivated by “love of nature” and by the understanding of the essence of the theme for the continuation of life. From this diversity of motivations, distinct strategies of environmental education actions are derived. In general, the connection between environmental actions and social aspects has grown. Apparently, environmental education is becoming consolidated as the key to the deflagration of more ample processes committed to life, bringing autonomy and transformation by the hands of its public. Besides this, we can affirm that the population in general associates environmental questions with post-materialistic values, being the occupation of those who, saturated by the goods of modern life, can be bothered with “smaller” concerns. This view, however, has been declining with the gradual incorporation of terms such as sustainability and environment by political parties, the media and social groups normally engaged in social conflicts.

From another perspective one can observe anti-distopic initiatives, that is, based on the search of individual and collective procedures articulated in the quest of avoiding a “nightmare” feared by the individual or group. As examples there are the projects that stimulate selective garbage collection, preservation of endangered species and soil conservation to avoid disease, extinction, erosion and silting. On the other hand, one can find projects with utopian motivations, that is, based on stimulating the elaboration and search of reaching collective dreams. Without forgetting the heuristic nature in this separation, we can affirm that in Brazil the educational processes with anti-distopic motivation predominates, despite the growth in the tendency of projects with utopic motivation a priori and of projects that, for example, are initiated to enhance the management of garbage at a school but that, with the passing of time, begin to motivate discussions on production and consumer patterns, school management and economic relations, and of power inside and outside that universe.

3) The relation between so-called “environmental” or “ecological” organizations and the remaining sectors of society passes through distinct moments of approximation and distancing, evolving toward partnership relationships and the incorporation of various items of the socio-environmental theme on their agendas. The multiplicity of social actors who incorporate it in different forms and distinct depth characterizes what various authors refer to as the Brazilian environmental movement: its multi-sectoriality. In research carried out in 1998, coordinated by Crespo, “What the Brazilian thinks about Environment, Development and Sustainability”, congressmen, administrators, government technicians, scientists, environmentalists and leaders of social movements, point to the structuring of an “environmental community”. Authors who discuss the Brazilian environmental movement classify it as multi-sectoral and complex, as it includes various segments of Brazilian society, such as state environmental agencies, non-governmental movements and organizations (NGOs), the socio-environmentalism branch (formed by NGOs, unions and social movements with other objectives, but that incorporate the environmental dimension within their scope), scientific research groups and institutions and a reduced number from the business sector. All these actors are, at different rhythms, making contact with environmentalism and incorporating it at different degrees.

In the 1990s, volunteering, which had marked the previous decade, acquired a more professionalizing dynamic, through the exchange and influences of these sectors. The objective of these entities moves from denouncing problems, to the search for viable alternatives for preservation and recuperation of the environment associated with the quality of life of the people. Especially since Rio '92, even given all the difficulties of heterogeneity and ideological differences of the movement, the sectors involved are forced to reach a dialog where the main axis is environmental sustainability.

The preponderant role of the environmental NGOs during the formation period of environmentalism, as well as in the creation of an environmental political field and in the social changes underway, stand out. In the creation of the environmental political field, these organizations exerted quite relevant pressure on the governments, on the development of research, projects and experiments, in supporting sustainable initiatives, in global and local relations and in the transparency of decision-making. But, since the

1990s, the division of responsibilities became very clear as the national and transnational NGOs established partnerships with universities, governments and research centers.

As an example, we underline the performance of the NGOs in the discussion on regulating the National Environmental Education Policy (law no. 9 795 of 27 April 1999), promoted by the temporary Technical Chamber of Environmental Education of the National Environmental Council (CONAMA). The capacity of articulation and organization in networks permitted hearing a great parcel of the militant professionals of Environmental Education.

As Crespo's research concludes, "The growth of the environmental community is uncontested, as well as the expansion of the signs of its institutionalization, with the multiplication of institutional and political spaces (federal, state and municipal councils), without taking into account the hundreds of spontaneous movements and organizations that call themselves environmental throughout the country".

This growth and diversification of the actors brings a list of recurring concepts in all the sectors interviewed in the aforementioned research: "articulation and synergy", "capillarity", "active citizenship", "decentralization", "consensus", "governability", "participative administration", "partnership", "strategic planning" and "sustainability", pointing to seven consensus: "sustainable development, the concrete utopia"; "growth of ecological awareness"; "Brazil does not have an environmental policy"; "Agenda 21, the notorious unknown"; "the Brazilian environmental movement is going through a crisis"; "it is the time of the urban question"; "only democracy will lead to sustainability". And in closing, the research points to, according to the interpretation of its authors, five issues that divide opinions: "growth without destruction"; "the dubious equation: weak State, strong market"; "irresistible globalization"; "from savage capitalism to intelligent capitalism"; "there are too many people for the planet".

4) *The tension between the assumptions about development* based on economic growth and the conjectures of environmentalism can be characterized by some data of the research by the Ministry of Environment (1997) according to which 47% of those interviewed give priority to the environment over economic growth and a great parcel reject pollution and environmental degradation as prices for development; however, the environment represents the seventh priority for Brazilians, and the lower the level of income, higher is the predisposition to accept the loss of environmental quality in exchange for job generation, denoting a perception of development as an inherently degrading process. Therefore, there would be a line of development that incorporates the concept of sustainability understood only as the long-term permanence of material progress.

However, the more critical environmental approaches question the proposal of a "sustainable development", preferring that of "sustainable societies" to express their ideals of participation, diversity, emancipation and survival. A deeper view of the subject can be found in the "Treaty of environmental education for sustainable societies and global responsibility", agreed upon by the civil society during Rio'92, which is a reference for the creation of the Brazilian Network of Environmental Education and for

various thematic networks, statewide and regionally, that appeared throughout the country in the last decade of the twentieth century and beginning of the twenty-first.

5) “*What does the Brazilian have that can facilitate or aggravate environmental awareness?*” With this question, answered by “environmental leaderships” from distinct sectors of the research “*What do Brazilians think of Environment, Development and Sustainability?*”, we can broaden our panoramic vision of the issue. As positive points, the following were brought up: “the joyfulness, love for life, creativity, miscegenation, which mark our “tropicality” (...) our cultural and historical heritage, with the celebration of nature, the vision of its greatness and abundance, the Indigenous and African myths regarding nature are other positive cultural factors. The openness of Brazilians towards novelty, their permeability, receptivity and flexibility to incorporate novelty that is, “cultural anthropophagi” also helps”. Among the factors that “aggravate the strengthening of environmental awareness, the most cited are, again, the aspects of our heritage, but this time from the colonialist tradition: a predatory with nature, the culture of abundance, which sees nature as infinite. The lack of an associative spirit, of love towards public wellbeing, the characteristics of individualism (...) comprise the second factor. The third negative point has to do with gaps in citizenship, such as education. It would result in the lack of collective spirit, which also reflects in the disregard of public space”. The mentioned research concludes affirming that a “significant parcel of the interviewees called attention to the ambiguous aspects of Brazilian culture that carry, sometimes in one and the same cultural tendency, positive and negative dynamics.

These five aspects give us a general idea of the tensions within the educational process of sustainability in Brazil, which is by no means characterized as completely organic. To try to understand, historically, the roots of the present state, is a task that surpasses the objectives of this essay, however we have selected some aspects considered relevant:

The exuberant natural richness found in Brazil upon the arrival of the Portuguese colonizers, the Judaic-Christian concept of the supremacy of man over nature (and of the European Christian over the wild natives), as well as the intensification of mercantilism in Europe in the XV and XVI centuries, were starting points in spreading an aggressive, predatory and exploratory posture on the part of future Brazilians regarding the natural resources and the peoples who lived here. In the so-called New World natural resources were considered never-ending, and the possibilities infinite. The first economic cycles were based on slavery, on the extractivism (*pau-brazil* wood and gold) and plantations (agricultural model based on monoculture in large areas destined to export products) where sugar cane and coffee stand out. The environmental and human degradation resulting from these cycles were important, including an abysmal alternation from wealth, to decadence and to abandonment of entire regions.

This was the tone of the social, economic and environmental relations in Brazil, basically agrarian, which lasted from 1500 to 1950 when more effective, post-war developmental, industrialization and urbanizing public policies appeared that influenced Brazil. This process was so aggressive that in 50 years the country became characterized as strongly urban (82% of the population living in cities). Public policies were

centralized and were little concerned with the regional peculiarities of the country; the industrial park and the capital accumulated from it were concentrated in the Rio - São Paulo axis, and the processes of migration and occupation of new areas were intensified.

The Military Coup of 1964 was the beginning of a period of dictatorship that lasted until the 1980s strengthening, in Brazilians, the feeling of impotence in relation to their own reality, draining subversive and creative sources. The economic miracle of the 1970s brought about a feeling of patriotism - “Brazil; Love it or Leave it” and a tendency toward homogenization socially induced by schools and the media, through the establishment of patterns, weakening of education, constraint toward alternative solutions and the growth of mass means of communication. These aspects, modification factors of education and of the public conscience in Brazil, acted toward increasing the distancing between the culture of the elite and the masses, diminishing criticism and isolating the discontent.

Alterations in the rules and control in the use of natural resources are associated with situations where predatory use becomes clearly unsustainable, or yet, when such a use directly affected some economic activity of relevance.

Economic rationality predominates, which approaches the technocratic and centralizing authoritarianism and which treats people as statistics, in counterpart to the complex ecological rationality that prizes individuality, democracy and citizenship. Economic rationality also reinforces the gap observed in the following aspects, only 29% see the city as an environment and only 38% see human beings as part of that environment. Since the 1970s the movements against economic rationality and for alternative options in medicine, agriculture, energy, diet, technologies and religiousness, among other issues have grown. Democratic liberties, human rights and ecological awareness are maturing in parallel and synergistically, moving out of alternative ghettos and gaining centrality in the discourse of the media and leaderships in all sectors of society.

One can observe, in an increasing manner, the implicit risks in the developmental model that was chosen by the political, technocratic, and entrepreneurial elite in Brazilian society. Several indices, obtained from the Census 2000, by the Brazilian Institute of Geography and Statistics (IBGE), expressed strong signs of poverty and social inequality: 7.5 million homes without bathrooms – corresponding to 16.74% of the homes in the country; 52% of the homes are not serviced by water supply in the northern region, an index that falls to 11.7% in the southeastern region; 61% of the homes in the northeastern region and 17.7% in the southeastern region are not serviced by a general sewage system or septic tank.

The options toward alternative paths of transformation have appeared as the exception. In general, one can observe the acceleration of the disintegration of the social web and environmental degradation caused by the desire and by the attitude of “at least guaranteeing ones own”. In this context, various initiatives and projects in environmental education experience this dilemma translated as “efficacy versus efficiency”. Some initiatives can even be described as part of this process of disintegration/degradation, serving as makeup or console within a whole, inserted in the search of profit and the private appropriation of natural and human resources. In these

cases, the lack of political and ideological concern toward these projects is more common; there is no commitment to social transformation. The label of “interdisciplinarity” at any cost has also not brought more quality, especially due to the little attention given to methodology.

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Luiz Antônio Ferraro Jr. developed many projects for the Environmental Ministry (MMA) as a consultant in 2003-2004. In 2005 he started his PhD studies at the CDS- Centro of Sustainable Development of the Universidade de Brasília. In 2004 he coordinated a graduation 'lato sensu' program on environmental education towards sustainability in Bahia. He also teaches Environmental Sciences to Biology and Engineering students. He led a program designed to promote social participation and organization in ten municipalities and 60 villages from a protected area which surrounds the most important water reservoir in Bahia State. His research focuses mainly on the evaluation and improvement of participatory planning processes in rural areas. Currently he supports an evaluation process of CPT - Comissão Pastoral da Terra, a wide known organization related to the Catholic Church and Social Movements in Brazil. From 1998 to 2000 he led an extension program at USP in the Itatinga Research Station with several environmental and social projects. In 1997 and he 1998 developed many projects while at ECOAR, an NGO in São Paulo. His main interest areas are environmental education, ecological economy, participatory processes, agroecology, rural education, social movements and themes related to sustainability. He has an agronomist degree from São Paulo University in 1994 and received his master's degree in science from ESALQ/USP in 1999.

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