Environmental education as public policy

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Abstract

Environmental education emerges as one of the possible strategies to face up to the double-order, cultural and social, civilization crisis. Its critical and emancipative perspective intends to trigger processes in which the individual and collective searches for cultural and social change are dialectically intertwined. The articulation of State and community principles, endorsed by the community, establishes the State as the latter's partner in the process of transformation of the status quo referred to by Boaventura de Souza Santos as a "brand new social movement". Such State must play the role of strengthening civil society as the mainstay of superstructure. In the environmental field, the State has advanced in terms of regulatory marks without an operational capacity befitting the demand, owing to the reduction of the State (in the 1990s) and to the absence of reforms other than that of the minimal State. Environmental education must, therefore, contribute to a State-civil society dialectical process that allows the definition of public policies based on dialogue. In this sense, the construction of environmental education as a public policy implemented by the Ministry for Education and Culture (MEC) and by the Ministry for the Environment (MMA) includes processes of direct intervention, regulation and contractualism that strengthen the articulation of various social actors (in both formal and non-formal education contexts) and their ability to carry out sustainable and educative territorial management, preparation of environmental educators, socio-environmental educommunication, and other strategies that promote a critical and emancipative environmental education. The public policies in environmental education will require a growing capacity of the State to respond, even if with minimal direct intervention, to the demands emerging from the articulated set of institutions acting on the critical and emancipative environmental education.

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The approach taken by the National Program of Environmental Education reaffirms the historically constructed understanding of the challenges faced by Environmental Education as a dialectical process of social and cultural transformation. Gramsci considers civil society as the mainstay of superstructure (Bobbio, 1999), that is, it is within civil society that is born the idea of a new order and of new values that imply a new structure, a new State. The State, in this sense, lives the paradox of being representation of an ageing thesis while congregating actors and sectors (on the left hand of the State, in Bourdieu, 1998) that tend to join the civil society in the cultural and social transformation, and in the function of pushing the transformation of the State itself in these new directions. Santos (1999) speaks of this perspective of action by the State as if the State itself integrated an "absolutely new social movement".

The urgent social transformation of which Environmental Education speaks aims at overcoming environmental injustices, social inequality, and the capitalist and functionalist appropriation of nature and of humanity itself. We experience processes of exclusion in which there is a widespread environmental degradation socialized among a subjugated majority, closely linked with the private appropriation of the material benefits generated. It is Environmental Education's role to foster processes that bring about increased power for the majorities presently subjugated, increased capacity for self-management, and the strengthening of their resistance to the capitalist domination of their life (work) and spaces (environment).

Environmental Education deals with a change of paradigm that implies at the same time a scientific and a political revolution. Paradigmatic revolutions, both scientific and political ones, are episodes of non-cumulative development in which an old paradigm is replaced by a new one, incompatible with the first. Political revolutions follow from the

feeling that develops with respect to the need for change. Such revolutions change not just science, but the world itself, for they impact the conception we have of it and of its way (Kuhn, 1969). Environmental Education, in particular, by educating for citizenship, can build the possibility of political action, in the sense of contributing to form a collective responsible by the world it inhabits. In this sense, we can recall Edgar Morin's thinking, which sees for the third millennium the hope of creating an Earth citizenship. The policy of Environmental Education developed in Brazil can then be seen as allied to the processes that promote the "sociology of the emergences" (Santos, 2002) as a strategy to overcome the paradigm of instrumental rationality that was responsible, in Brazil and worldwide, for stifling participation, emancipation, diversity, and solidarity.

To face the deeper causes of the erosion of diversity we need to know ourselves and our civilizing processes, in the sense employed by Boaventura de Souza Santos when he invites us to carry out a virtual archeology of the present. We shall certainly find psychosocial, cultural, economic, educational, historical and conjunctural reasons that have outlined a devastating model of the relationships established between human beings, and between these and the environment. This model, a historical construction based on the erosion of biological and cultural diversity, homogenizes knowledges, savors, landscapes, behaviors, species and races, through the promotion of consumerism, of mass communication, of genetics and authoritarianisms of all sorts.

The environmental issue is emblematic of the paradox faced by the States. In the 1970s and 1980s we had a period in which the neoliberal doctrine imposed the concept of a minimal State, of minimal regulation, at the same time that the growing complexity of society demanded more regulation and greater interference of the State in new issues. Society

felt the need for more State while public opinion stood more as anti-State. As pointed out by Sader (2005), Capital has been crying for a minimal State with regard to the public character of the State, and for a maximal State when it comes to credit programs, financial help in insolvencies, incentives to exports, in short, a strong State that will guarantee the conditions for the expansion of the markets (Laurrel, 1995). We are still in the wake of a neoliberal tidal wave opposed to State intervention and regulation that had its apex in the 1990s, as remarked by Bursztyn (1994), feeling the need for an institutional reform of the State that would overcome this paradox and represent a higher efficacy in regulation. Cavalcanti (1999) describes education, participative management, and dialogue among stakeholders (actors, social subjects) as the three main parameters for environmental regulation. The same education that is becoming less and less a public right, to become a space for investment (Sader, 2005). Rescuing the public character of the State requires its expansion in the spheres of education and environment. A State grows when its historical functions begin to demand more action (horizontal growth of the State) or when it is impelled to take on new functions (vertical growth of the State). The latter is qualitative, while the former is quantitative, so that the regulating function of the State in the environmental field represents a qualitative increment of the State, that is, a new function.

In the present work we make a few considerations about the public policies targeted at the socio-environmental issue, and more specifically at Environmental Education, which has as its purpose to open spaces that can contribute to the improvement of the quality of life of the human beings and of all species and natural systems with which we have shares the planet throughout the ages. This happens when we take on our individual and collective responsibilities, interconnected by the social and environmental circumstances. Responsibility requires, amongst other things,

autonomy to participate in the debate about public policies, such as the quality of education, the empowerment of small farmers increasing the local offer and the diversity of good quality products, the changes in the country's energy and transport matrices, the relation of local communities with the production of waste, and compromises for the common good.

Environmental Education, the role of the State and the public policies

In order to understand Environmental Education as a public policy, it is interesting to begin with the meaning of these last two words, and contextualize them in the history of environmentalism, introducing them in the governments' agendas, as well as their unfolding into the areas of formal and nonformal education.

The words policy and politics can be traced back to the Greek, and their meaning is related to limit. Polis was the name given to the wall that set the boundary between the city and the countryside around it; only later the word polis came to designate what was contained inside the walls. Recalling this meaning of limit may help us understand the true meaning of politics, which is the art of defining limits, that is, of what is the common good (Golçalves, 2002, p. 64). To Arendt (2000) plurality is the "condition through which" (conditio per quam) of politics; it implies, and has as its purpose, the conciliation between plurality and equality. When we understand politics from the origin of the word, as limit, we are not referring to a regulation upon the society, but to a dialectical society-State regulation that promotes plurality and the social and political equality.

By its turn, environmentalism puts before us the question of the limits that societies have in their relations with nature, and with their own nature as societies. Rescuing the politics is thus fundamental to establish the idea of sustainability resulting from the environmental struggles.

Environmental Education is born out of an education process that leads to an environmental knowledge embodied in the ethical values and in political rules of social life and market, tied to the issue of the distribution of benefits and damages of the appropriation and use of nature. It must, therefore, be directed towards an active citizenship, considering its sense of belonging and of co-responsibility, which, through collective and organized action, seeks to understand and overcome the structural and conjunctural roots of the environmental problems. It is the case here of building an ecological culture that understands nature and society as dimensions intrinsically related, which can no longer be thought of - neither in governmental decisions, nor in the actions of civil society - in a separate, independent or autonomous way (Carvalho, 2004).

Considering the ethics of sustainability and the postulates of citizenship, public policies can be understood as sets of formal and informal procedures expressing the relation of power, and aimed at the peaceful resolution of conflicts, as well as at the construction and improvement of the common good. Their origin is in the demands coming from various systems (worldwide, national, state, municipal) and their political, social, and economic subsystems, in which the issues that influence society become public and create trends of opinion with agendas to be discussed in specific forums.

The environment as public policy, not as a point concern, appears in Brazil after the Stockholm Conference of 1972 when, following initiatives of the United Nations to include the theme in the governments' agendas, the SEMA (Special Secretariat for the Environment) was created, linked to President of the Republic. But it was only after the 1st Intergovernmental Conference on Environmental Education in Tbilisi in 1977 that Environmental Education was introduced as a strategy to achieve the environmental and social sustainability of the

planet. Still in the 1970s, the discussion started on a development model that would bring together the economic relations and the wellbeing of societies and the rational and responsible management of the natural resources that Ignacy Sachs (1986) called ecodevelopment.

In 1983, under the presidency of the Norwegian Prime Minister Gro Brundtland, the World Commission on Environment and Development was created and, in 1987, the committee published *Our Common Future*, which became known as the Brundtland Report. Since the publication of this report, the concept of *sustainable development* began to be used instead of the word ecodevelopment, and became the basis for the reorientation of development policies and their direct relation to environmental issues.

Currently, the concept of sustainable development indicates clearly the treatment given to nature as a resource or raw material destined to the objectives of the market, whose access is prioritized to the segments of society detaining the control of the capital. This paradigm maintains the pattern of development that produces inequalities in the distribution and access to these resources, engendering poverty and the absence of citizenly identity.

In this sense, an Environmental Education for socio-environmental sustainability came to be seen as a goal, recovering the meaning of ecodevelopment as a process of transformation of the natural environment that, through the use of appropriate techniques, prevents wastes and highlights the potential of this environment, catering for the needs of all members of society, taking into account the diversity of natural resources and of the cultural contexts. Environmental Education contributes in this context guided by an environmental, transdisciplinary rationality, thinking the environment not as a synonym of nature, but as a basis of interactions between the physicalbiological medium and the societies and culture produced by their members. Leff (2001) places

environmental rationality as a product of the praxis, that is, it would be "a set of interests and social practices articulating various material orders that give meaning and organize social processes through certain socially constructed rules, means and purposes" (Leff, 2001, p. 134).

This concept of Environmental Education was partially incorporated by the National Policy for Environmental Education (PNEA – Act 9795/99), which in its first article defines Environmental Education as processes through which the individual and the collectivity build social values, knowledge and abilities, attitudes and competencies aimed at the conservation of the environment, an asset for the common use of the people, essential to a healthy quality of life and its sustainability¹.

It also emphasizes the issue of the methodological and epistemological interdisciplinarity of Environmental Education as an "essential and permanent component of national education, which must be present in a articulate manner in all levels and modalities of the educative process, in formal and non-formal ways" (2nd Article). It reinforces the collective responsibility of its implementation, its basic principles, objectives and strategies. This Act offers a route for the practice of Environmental Education, and in its implementation (Decree 4281/02) it nominates the Ministries for Education and for the Environment as the managing bodies for this policy.

Despite the existing notion in Brazil that laws "do not pick up", a law exists to be obeyed or else questioned, so that soon after the promulgation of the National Policy for Environmental Education (PNEA), two bodies were created to carry out the PNEA: the General Coordination of Environmental Education at the Ministry for Education and Culture (MEC), and the Environmental Education Directorate at the Ministry for the Environment (MMA).

Thus, Environmental Education becomes part of the public policies of the Brazilian State in both forms – as horizontal growth (quantitative) and as vertical growth

(qualitative) –, for, while within the MEC it can be seen as a strategy to increment public education, at the MMA it represents a totally new State function.

A public policy represents the organization of the action of the State to the solution of a problem or to the fulfillment of a specific demand of the society. As to their modality, public policies can take place through direct intervention, regulation or contractualism. The prospect of public policies of the managing bodies of Environmental Education includes today these three modalities. The MEC and the MMA, through their respective sectors of Environmental Education, and aligned with the ProNEA (National Program of Environmental Education) are implementing programs and projects with the public school systems, conservation units, municipal governments, private companies, unions, social movements, organizations of the civil society, consortiums and committees of river basins, and agrarian reform settlements, amongst other partners.

Within the sphere of the State, Environmental Education undoubtedly falls into what Bourdieu (1998) named "the left hand of the State", gathering social workers, educators, and teachers whose actions are largely ignored by the so-called "right hand of the State" (the areas of finances, planning, and banking). When working on the recovery from the social and environmental damages imposed by the logic of the market, the agents of the "left hand" may often feel deceived and disavowed because of the paradoxes they live in a chronic way, such as the lack of resources, the struggle for biodiversity living alongside the expansion of farming for monoculture or transgenic crops, large civil works of huge impact, revision of old conquests etc. Instead of a plaintive immobility, we believe that participative educational initiatives for environmental

^{1.} We say 'partially' because the policy is aimed not just at the conservation of the environment (seen here as external to society), but also to its recuperation and improvement and, above all, to the improvement of the quality of life of all beings, human and non-human.

responsibility result in the involvement and organization of people and social groups in the struggle for the improvement of the quality of life based on post-materialistic values that question the symbolic material needs of consumerism, and unveil other possibilities of happiness, joy, and living.

According to this belief, the role of the State in Brazilian Environmental Education can be one of support, defined in a democratic dialogue with the various subjects of this politics. Again, we agree with Sachs (2004) that today, without denying the need to reduce plethoric administrations, we have to increase the public social services, strengthening the "left hand" of the State. England, which was an example of State-reducing policy, has created 500,000 additional jobs in public services in the last eight years (1997-2004). The reform of the State, which implies in the increase of its efficiency, does not mean in any way its reduction, for in sectors of public regulation, such as education and environment, there is a clear need to expand both vertically and horizontally the Brazilian State.

In the Ministry for the Environment - MMA

Following the principle of advertising and making democratic its public policies, the MMA has focused on programs that envisage the possibility of involvement of 100% of the Brazilian population. Also, recognizing the operational limits of the State for such enterprise as a direct intervention, it has sought auxiliary forms that would enable these wide and democratic policies. We can mention some programs and projects aimed at the towns and their regional connections, such as the consortiums and committees of river basins destined to increase the involvement of the inhabitants of that region, who need and can be supported in their daily struggles.

Sustainable educator municipalities and The preparation of environmental educators are

two programs designed to be carried out through partnerships between the CIEAs – Interstate Commissions for Environmental Education –, Environmental Education networks, state and municipal governments, universities, municipal consortiums or committees of river basins, IBAMA offices and other federal and state public bodies operating in every region of this huge country. They are aimed at promoting questioning of a certain mode of production and consumption that destroys the biodiversity and compromises survival, seeking to foster changes in attitudes and behaviors, and coordinated actions to improve socio-environmental living conditions.

The strategic proposal entails the commitment to a group of towns of a given eco-region², with the implementation of four educational processes:

- 1 preparation of environmental educators through programs offered by MMA-approved partners, to help the process to percolate and lay roots;
- 2 socio-environmental educommunication (mass, disseminated): communication strategies with educational and decision-making purposes involving the production and distribution of educational materials, campaigns of Environmental Education and the use of mass communication media;
- 3 educative structures: municipal, from school to street, from the vivarium to community kitchen garden, among others in which, or whence, actions and projects aimed at sustainability take place, having as their objective transforming the quality of life and also the definition and implementation of their education role;
- 4 forums and collectives: are the different spaces of democratic participation that propose to carry out projects towards sustainability, and at the same time to discuss values, methods and objectives of action.

^{2.} Such as the 29 municipalities of Paraná III, all municipalities of the Alto Paraquai Basin, or the tracts of the São Francisco Basin, for example.

The first of them, the creation of teams of instructors of environmental educators, contributes to implement the other three, and when we described them briefly we highlighted their basic features, which we consider to be important for any project of Environmental Education that may have biodiversity or some other issue as a generator theme, but that have as their higher commitment the education of people for life.

The preparation of these environmental educators is guided by three indissociable pedagogical lines: the socio-educational intervention as pedagogical praxis, the creation of interpretive and learning communities, and the self-managed access to a menu of contents and instruments pertaining to each context's socioenvironmental problems. To establish wide and continuing training programs the DEA/MMA have as their strategy the articulation, the guidance and the support to collective educators, understood as groups of institutions capable of carrying out processes of education (universities, movements, NGOs, unions, church organizations, Secretariats of State, NEAs from IBAMA, EMBRAPAs, state and federal research and extension bodies etc).

The actions of the DEA/MMA team focus on building partnerships for the execution of the proposals and agendas with various institutions and social groups for each State, in order to establish the CIEAs, with the institutions that work with the preparation of environmental educators, with groups of towns, and with governmental institutions. Apart form that, they seek to develop the instruments for transversal support to the CIEAs, to the sustainable educator municipalities, to the collective educators, to the training programs of educators, such as the SIBEA, to the "green rooms", documents of technical support, publications, platforms for distance learning, virtual rooms, support to workshops, among others.

In the Ministry for Education - MEC

Wide environmental issues, as well as more specific areas are dealt with from a

systemic viewpoint, based on four structuring actions: National Conference of the Environment, Teachers and Students Continuing Education, Digital Inclusion with Down-To-Earth Science, Education of Chico Mendes. MEC's program proposes to build a permanent process of Environmental Education at the schools. Using presence, distance, and diffuse modalities of teaching, the actions involve State and Municipal Secretariats for Education, teachers, pupils, school community, civil society, and university. The program gives continuity to the awareness initiatives promoted at the National Child and Teenager Conference for the Environment, and also to the process of dissemination of the Parameters in Action - Environment.

To become effective and sustainable, it encourages the installation of a *Com-Vida* (Commission for the Environment and Quality of Life) at the school, with the participation of the Youth Councils for the Environment, and the implementation of the Agenda 21 at the school, giving support to curricular and extracurricular activities.

In 2003 the Ministries for the Environment and for the Education launched a campaign, devised by the ministry Marina Silva, called Let's take care of Brazil with the National Conference for the Environment, with a version for adults and one for youngsters. The National Child and Teenager Conference for the Environment had the direct participation of nearly 16,000 schools, in which around six million people, including students, teachers and communities debated environmental issues. This movement included, in addition to ordinary schools of fundamental education, also indigenous schools, schools in quilombos3, in riverside and coastal communities, in landless farmers' settlements, fishermen communities, and schools for those with special needs.

With regard to the contents of the work, the process of the Conference turned the school

^{3.} *Quilombos* are communities originally founded by escaped slaves in Brazil.

into a space for the community to debate how we want to take care of our water, of the living beings, of our food, or our school, and of our community, an objective consolidated in a document entitled "A step by step guide to the Environment Conference at the school". Each conference at a school elected a delegate and his/her deputy, defined a proposal of environmental policy, and created a poster showing to the community its proposal for the *Let's take care of Brazil*. The proposals were systematized in a decentralized way, through the Internet, in all states.

Since the conferences are biennial, in the 2nd National Child and Teenager Conference for the Environment with the theme *Experiencing diversity at schools*, a policy was adopted to popularize the international agreements of which Brazil is a signatory: the Convention on Biological Diversity, the Convention on Climate Change, the Rome Declaration on World Food Security, and the Durban Declaration of the World Conference against Racism.

With this initiative, the Brazilian government responds to the publicizing principles present in all those international documents, and also in the Agenda 21, whose Chapter 25 establishes that the governments, according to their strategies, should take measures to allow the participation of the youth in the decision-making processes related to the environment. Despite the fact that the majority of youngsters (85%) do not take part in groups, 57% would like to participate in groups for the protection of the environment, and 60% would like to be part of associations or councils connected to education⁵. These data are confirmed in the Letter Youngsters Taking Care of Brazil (Resolutions from the National Child and Teenager Conference for the Environment), in which they suggest the increased valuation of the spaces for participation through the creation of young councils at the schools, NGOs, and youngsters' unions. They reaffirm the importance of implementing the local agendas 21, and of their involvement in the various sectors of society in the effort to overcome the challenges. Ecology and environment is for 26% of Brazilian youngsters the most important issue to be discussed by the society⁶.

In formal education, the PNEA's Managing Body, via the MEC, has the task of supporting teachers' quest to become environmental educators open to participate in processes of knowledge building, research, and educational intervention based on values directed at sustainability⁷ in its multiple dimensions. In strategic terms, integrated with the National Program for Environmental Education (ProNEA) and giving continuity to the Conference, a large action of presence teacher education was launched to encourage the penetration of Environmental Education from the perspective of an ecological ethics that promotes empowering transformations of the individuals, groups, and societies. Therefore, the conceptual and practical advancement is fostered along the following lines:

- offering instructional materials that give access to information and knowledge;
- creating permanent instruments for the debate, research, and action in schools in order to generate significant local knowledges;
- promoting the school-community relation, encouraged by the Commissions for the Environment and Quality of Life at Schools (Com-Vida).

A well-defined action is the implementation of a computerized system in which applications for school studies on the environment, and especially on biodiversity, will run. This research network at the schools allows the assessment and distribution of local knowledge without the need for sophisticated and expensive laboratory procedures. The information about the schools, the flora, fauna, and climate around them and in their microregion

- 4. Available at www.mma.gov.br/propostasdasescolas/.
- **5.** These are results from the study *Profile of the Brazilian Youth*, an initiative of the Project Youth/Citizenship Institute, Institute of Hospitality, and Sebrae carried out in December 2003.
- **6.** The original text presents the proposals on the topics of water, school, community, food, and living beings.
- **7.** According to authors such as Ignacy Sachs, the dimensions of sustainability are the social, economic, cultural, political, ethical, and spatial.

will be georeferenced, with guidance for reliable collection and standardized descriptive results. On the Internet, as an area of SIBEA, it will be possible to build a "collective atlas" of themes such as biodiversity, water quality, socio-environmental situation of the communities, and nutrition. It is a significant form of learning following Vygotsky's ideas in the sense of being mediated, cooperative, social, and negotiated.

In 2004 a book was adopted as a guiding theme to articulate activities at schools: Sustainable consumption: an education manual (Idec/MMA/MEC, 2004). Choosing just one material for teachers from almost four thousand towns of every region, biome, and social stratum of the country represented a huge challenge. A book was adopted that would offer a common basis of contents, complemented by a pedagogy projects encouraging a collective construction. The environmental issue is presented through various themes (water, biodiversity, transportation, food, energy, and advertising), based on a call for a new position with regard to consumption: the conscience of the need for our getting personally involved and at the same time of our participation in collective movements of paradigmatic change. In this sense, knowledge is essential for a critical view of reality, and to the search for concrete ways of acting on the environmental problems. The relevance of this book is in the fact that it proposes new concepts for the patterns of relation between the modern society and consumerism and nature, in an organic, interdisciplinary, and transversal manner as regards the school curriculum as a whole.

Because it is not tied to a rigid curriculum scheme, Environmental Education is able to expand knowledge in a variety of dimensions, always focusing on local and planetary environmental sustainability, learning with the traditional cultures, studying the science dimension, offering opportunities of participation in environmental public policies and for the production of knowledge within the school.

We have sought open and innovative forms of building, alongside instructors, teachers and pupils, what Edgar Morin calls pertinent knowledge, which helps learning about global and fundamental problems to then insert in them partial and local knowledges. These two knowledges bring implicit in them the search for a complex, non-fragmentary knowledge that expands continually without, however, aspiring to a totalizing, and also limited, knowledge. Pertinent knowledge recognizes that, amidst the complexity of the real, total comprehension it is never possible. That is also why the search for knowledge becomes an unending effort, but one that can turn into a virtuous circle.

Because it is not a discipline, Environmental Education offers opportunities of methodological innovations along the lines of *educere* – to bring out –, being as it is necessarily motivated by passion, by the joy of knowledge and practice directed at the complex dimension of the maintenance of life.

On one hand, we think about the diversity of knowledges and on the complexity of natural and social systems; on the other our "pedagogy of praxis" involves working with the simplicity of the natural, of didactic-pedagogical materials, of the dialogue and of sharing experiences and knowledges. To cope with the complexity of the dynamics of the contemporary world, we have chosen the art of simplicity. This can only be done if we have clear in our minds that modern society confuses, on one hand, complexity and complication and, on the other, simplicity (the essence of the complex) and being simplistic, that is, reducing biodiversity to natural resources, and everything to merchandize and, therefore, something to be consumed.

It is hoped that with this systemic and participative view the educational processes will encourage environmental educators to believe in their capacity for individual and collective action, by incorporating concepts, adapting methods, enhancing techniques and improving their daily practices.

The MEC/MMA articulation in the preparation of environmental educators

The MEC and the MMA, in accordance with the National Policy for Environmental Education and with the National program for Environmental Education, develop proposals for the preparation of environmental educators. Each of the ministries acts alongside its specific public within a critical, popular and emancipative perspective, and aims at establishing continuing processes articulated with transforming processes based on a systemic and permanent view of the educational process, instead of on-off courses or activities based on an empty activism.

In this sense, the deeper the methodological articulation, the more the synergy between the actions of the ministries is encouraged. We can distinguish three spheres of articulation: that of the methodological design, that of the preparation workshops, and that of the supporting instruments.

In all these spheres there are different levels of interaction between the actions developed that are conjointly deepened and expanded. This proposal was created within the preparation workshops to be implemented in at least six locations in the São Francisco basin, four locations in the Alto Paraguai/Pantanal basin, and also in locations in the basins of Paraná III/Itaipu, with the possibility of being extended to other contexts.

Methodological articulation

The ideas of the pedagogy of the praxis (MMA-DEA) and of the pedagogy of collective and transformation projects (MEC-CGEA) converge as pedagogical axes that consolidate the preparation of the environmental educators. The concepts of collectives of political participation and solidary learning are also signals of the convergence of the proposals. The methodological articulation implies the

complex knowledge, non-fragmentary, and that expands continually, without seeking a totalizing knowledge, also limited, as we have pointed out.

Some topics are then defined from which the facilitators (MEC-CGEA) and the reinforcers (MMA-DEA) can draw guidance to articulate the preparation methodologies:

- Educator collectives: the interest in the continuing perspective of education reflects on the inclusion of teachers after they leave the seminars, so that they are encouraged to guarantee this continuity by taking part in the educator collectives formed for each small region (eight to twenty municipalities) and articulated in a network within each basin or State. It is interesting to think about an articulated MEC-MMA strategy to consolidate such collectives.
- Com-Vida-MES: the Com-Vidas can articulate processes of the Sustainable Educator Municipalities insofar as they articulate themselves (between schools, between municipalities), and to the extent that they trigger a process of Agenda 21. The Com-Vida proposes to do education offering a structuring space for Environmental Education at the school that is collaborative and including. The synergy of the efforts from both ministries happens through the contributions from the MMA to the participation of the Com-Vidas in the Sustainable Educator Municipality.
- Generator theme menu: the sustainable consumption generator theme can be understood as a trigger for a dialogical meeting in which other themes converge, leaving room for other generator themes, which can be seen as an entry door to pertinent knowledge, and not as an end of their own. The generator theme promotes menus through the diversity, dialogue, and through the collective construction of paths and open routes. For that, it is essential the development, in partnership with the

educator collectives, of a nationwide menu of contents and competencies that can accessed by the groups and educators taking part in local initiatives.

• PAP groups – Interpretive learning communities/environmental educator teachers: within the concept of learning and interpretive communities, we plan to have in each town at least one group mediated by a member of the PAP group-Educator Collective that will meet regularly with the students to offer topics from the menu of contents and to discuss the projects. The inclusion of some or all Instructor-teachers from that municipality, as well as the managers from the Secretariat for Education, makes them also members of the PAP.

Articulation in workshops

Deeper articulation will take place, as in the case of the process in the São Francisco basin region, through four-day long workshops. The first and the last days would be common to all, that is, the two publics would be together looking at the common context and articulating strategies.

1st Day - Situation analysis: the context of the São Francisco (or some other region), the MMA-MEC projects for that context (in the case of the São Francisco, the revival project), the local context (to make the situation analysis more local, the struggle for resources, the socio-environmental scenario, the trends, the institutional scenario, all mediated by a local partner); collective development of an overall picture of the socio-environmental problem, discussion about the concept preparation of environmental educators and reflection upon the challenges faced by the environmental educator in this context. 2nd and 3rd Days - Specific agendas: in these two days each partner develops its agenda alongside its specific public. The

MEC-CGEA conducts the processes of preparation with teachers and pupils; the MMA-DEA conducts the mediation of the workshop for the preparation of the PAP-Collective Educator center of the region.

4th Day – Articulation: the groups present their agendas and negotiate the articulation of:

- MES/Agenda 21/Com-Vida;
- Learning and interpretive communities of the municipalities;
- Articulation of the projects.

Instruments and supporting material

It is important that, for each context and also in general, supporting materials and common instruments are produced to facilitate the understanding by the officials from the Ministries and the perception of the synergy between the processes developed by the environmental educators taking part in the proposals for preparation. To start with, we suggest three materials:

- A common problematizing text situating the challenge of each context (São Francisco, Pantanal, Amazon etc) and the role of Environmental Education in facing the socioenvironmental problem;
- An assessment of didactic materials produced regionally, and of institutions whose activities are aligned with the proposal, so that we can jointly articulate our partners;
- A text with the common proposal for work, demonstrating the dialogue between the spaces of political participation, the projects of educational intervention, and the preparation processes.

Beginning with the experience of articulation in the São Francisco basin, we shall deepen the dialogue, systematizing and generating synergy between the strategies,

concepts, didactic materials, partners, public and resources.

Final considerations

Analyzing the proposals of the managing body concerning the modalities of public policies, we can understand them under the perspective of the *contractualism*, and as governed by the *subsidiariness principle* (Castells, 1999). To corroborate this statement, the examples and actions presented show that the State undertakes the promotion, the subsidy and the certification of partnerships between the training institutions already having as their intrinsic role the preparation of educators or that can take on such function, so as to guarantee a continuing process of preparation of environmental educators.

Otherwise, should the State decide to develop its preparation program via direct intervention, it would be necessary to hire and prepare vast teams allocated to each state of the federation. Such form of conducting the proposals, besides being impractical, would go against the recognition that Environmental Education must be developed in a close dialogue with the agents and with the institutions from each region. The proposal of Sustainable Educator Municipalities (SEM) also aims at establishing contracts between municipalities, between the municipalities and their inhabitants, with regional institutions, and with the councils to guarantee a process of education and management of municipal sustainability. Every effort of the government between 2003 and 2006 will be in conceiving the contracts and in the technical and political articulation to create them. With time, the subsidiariness of the action of the State should become clearer, and those actions will be defined in dialogue with authentic observatories of Environmental Education composed by the several institutions engaged in the execution of public processes of Environmental Education. At first, we believe that such subsidiary actions will be quite diverse, viz., the support to interinstitutional meetings, credit lines via the National Fund for the Environment, database of experiences (SIBEA), publications of interest transversal to several public initiatives, public certification etc.

As a public policy, some modalities of action of the MEC fit better in the perspective of direct intervention, which is natural, since such intervention centers particularly upon public education, which already has its structure established by a direct State policy. The objective is to insert Environmental Education into the daily life of public education at all levels of education.

Castells (1999) mentions eight principles of the networked State that related generally to the perspective of public policies that we have been developing: the subsidiariness that dialogues with decentralization; the flexibility; the coordination; the citizenly participation; the administrative transparency; the technological modernization; the transformation of the agents of the administration, which implies the recognition of the human resources of the State, and the retroaction in management (a consequence of dialogicity in implementation of policies).

In time, we can envisage that both sectors of Environmental Education - the MEC's and the MMA's - shall permeate through the educator collectives, which shall become one of the main partners in the development of the public policies in Environmental Education. This modality, closer to contractualism, and the actions closer to a perspective subsidiariness, do not imply at all in a reduction of the role of the State or in a diminished importance in the maintenance of a good public-governmental structure for the implementation of the public policies in Environmental Education. On the contrary, we expect more and more that society will organize, and that institutions will evolve and qualify their demands, so that governments will subsidize their practices of Environmental

Education. Santos (1999) talks of an "articulation between the principles of State and of community, endorsed by the latter", therefore understanding the "State as a brand new social movement". In the limit, such opposition to the perspectives of a minimal State, a mere administrator of market contracts, means a reformed State, and possibly expanded by the dialogue with civil society:

The social regulation that emerges from this new form of politics is much wider and tougher than the regulation proposed by the State in the previous period, but since it is also much more fragmented and heterogeneous, both with respect to its sources and to its logic, it is easily mistaken by social deregulation. Actually, a substantial part of the new regulation occurs

through political subcontracting to different groups and agents in competition, divulging different conceptions about the public goods and of the general interest (Santos, 1999, p. 256).

An important question is: what Environmental Education will be regulated, considering that the government has a clear view that it must be popular, critical, and emancipative? Future governments may not agree with such perspective, but we hope that an articulated collective is constituted within the civil society that will not allow the actions of the State that support this vision to be abandoned. The public policies in Environmental Education are, thus, a dialectical process shared between the State and the civil society.

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