

For more aesthetic experiences of nature in public primary and secondary education schools¹

Por mais experiências estéticas da natureza em escolas públicas de educação básica

Valéria Ghislotti Iared*
Alberto Cabral Ferreira*
Lakshmi Juliane Vallim Hofstatter**

ABSTRACT

This theoretical essay aims to problematize the (lack of) aesthetic experiences of nature in the school curriculum and practices and to evoke possibilities of coping with that absence. We understand that, in the tangles of life, aesthetic ~ ethical ~ political² experiences are constituent and not dissociated and that our bodies are in constant correspondence with the more than human world. We start by retrieving the main global documents and national laws that guide environmental education in schools. Based on that, we discuss the neglect of school environmental education by recent public policies. Orientated by the philosophical current of ecophenomenology, we defend a less anthropocentric school environmental education that also advocates for more aesthetic experiences in nature. Thus, we discuss the legislative limitations, school space configurations and the curriculum for this environmental education to be achieved.

Keywords: Sensitive. Formal education. Affectivity. Ecophenomenology. Environmental education.

Translated by: Martin Charles Nicholl. E-mail: martincharlesn@yahoo.com.br

* Universidade Federal do Paraná. Palotina, Paraná, Brasil. E-mail: valiared@gmail.com - <http://orcid.org/0000-0002-1082-9870>. E-mail: albertocabrall@hotmail.com - <http://orcid.org/0000-0002-7137-0194>

** Instituto Federal de Educação, Ciência e Tecnologia Baiano. Salvador, Bahia, Brasil. E-mail: lakshmivallim@gmail.com - <http://orcid.org/0000-0002-6913-3499>

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2 The tilde refers to the ontological commitment to not dissociating these concepts. To understand more about this subject, see Payne (2017).

RESUMO

Este ensaio teórico objetiva problematizar as (a falta das) experiências estéticas da natureza no currículo e nas práticas escolares, e suscitar possibilidades de enfrentamento dessa ausência. Entendemos que as experiências estéticas-éticas-políticas³ são constituintes e não dissociadas nos emaranhados da vida, e que nossos corpos estão em constante correspondência com o mundo mais que humano. Iniciamos o manuscrito, resgatando os principais documentos globais e leis nacionais que orientam a educação ambiental nas escolas. A partir disso, discutimos a negligência das recentes políticas públicas em educação ambiental no âmbito da escola. Pautadas/os na corrente filosófica da ecofenomenologia, defendemos uma educação ambiental escolar menos antropocêntrica e que preconize, também, mais experiências estéticas na natureza. Assim, argumentamos sobre as limitações legislativas, configurações de espaço escolar e do currículo para que essa educação ambiental seja concretizada.

Palavras-chave: Sensível. Educação formal. Afetividade. Ecofenomenologia. Educação ambiental.

Introduction

Ethical and aesthetic values have permeated environmental education ever since the earliest documents on the subject were drawn up, such as the Belgrade Charter in the context of the International Seminar on Environmental Education in 1975, the Recommendations of the Intergovernmental Conference on Environmental Education in Tblisi in 1977, and the Environmental Treaty for Sustainable Societies and Global Responsibility, in 1972. In Brazil, the *Política Nacional de Educação Ambiental* [National Environmental Education Policy] (PNEA) (BRASIL, 1999) and the *Diretrizes Curriculares Nacionais* (DCNs) *em Educação Ambiental* [National Curricular Guidelines on Environmental Education] (BRASIL, 2012) also foster the practice of values in both the formal and informal ambits.

Environmental education is currently experiencing a period of retrocession due to the restructuring of the *Ministério do Meio Ambiente* [Ministry of the Environment] (MMA) and of *Ministério da Educação* [Ministry of Education] (MEC) with the extinction of the coordinating bodies responsible for this area in the federal sphere (ANPED, 2019). In 2017, the Ministry of Education's National Education Council published CNE/CP Resolution nº 2 (BRASIL, 2017) establishing and preparing the way for the implementation of the *Base Nacional Curricular Comum* [National Common Curricular Base] (BNCC), designed to replace the extant *Parâmetros Curriculares Nacionais* [National Curricular Parameters] (PCNs). The new document entirely suppressed environmental education from the curriculum of basic education (primary

3 O til remete ao compromisso ontológico de não dissociar esses conceitos. Para compreender mais sobre esse assunto, ver Payne (2017).

and secondary education) meaning that there is an additional gap to be confronted in terms of school curricula (BARBOSA; OLIVEIRA, 2020; BEHREND; COUSIN; GALIAZZI, 2018).

Apart from the above mentioned global and national documents, the academic literature has been calling attention to the silencing of aesthetic and ethical values and, more specifically, of the aesthetic experience in environmental education (IARED; OLIVEIRA; PAYNE, 2016; MARIN; KASPER, 2009). In the present article we aim to address the following questions: What are the challenges the school faces for contemplating the aesthetic experience of nature? What are the possible ways in which to incorporate the aesthetic experience of nature in the school?

Our conception of aesthetics, further discussed in the next paragraphs, is supported by a framework of ecophenomenological references (BROWN; TOADVINE, 2003; SATO, 2016) embracing the non-dissociation of aesthetics~ethics~politics, whereby the body~mind is engaged in the world in *inter-actions* with the more than human world (RODRIGUES, 2019). This last author suggests the term “inter-action” insofar as it connotes the body’s movement and intentionality rather than a mere “connection” with nature; the latter term denotes an anthropocentric approach insofar as it conceives nature as being passive and the centrality of actions as being restricted to humans.

That being so, this manuscript is configured as a theoretical essay that seeks to raise, and problematize the aforementioned questions. We thus present a legal panorama of environmental education in the schooling context. The next topic presents a construction of the foundations of our theoretical reference framework and then, based on it and adopting an ecocentric approach, goes on to enumerate the gaps and obstacles associated to the incorporation of the aesthetic experience of nature in primary and secondary public education schools. Those challenges converge on a fundamental aspect: an ontological review of the way that we conceive the experience itself and the more than humans in that experience.

Environmental Education in the school context

Schools are extraordinary spaces in regard to multiculturalism and the circularity of cultures (TURA, 2002), insofar as they bring together different subjects, in different role (teachers, students, other staff etc.), stemming from diverse cultural realities. In that sense schools have enormous potential for offering living experiences and exchanges that generate learnings in a plurality of knowledge fields that reflect on ethics in human beings’ relations with the world.

However, in the vast majority of cases that diversity is not reflected in school curriculum or practices. Tura (2002, p. 162, our translation) shows us the extent to which the curricula and the decision as to what should be taught in the schools are

a “social construction permeated by the logic of the social stratification and organization and the relations of power”. In agreement with that author we would state that the curricula are influenced by political, social and economic aspects subject to progression and retrocession. Furthermore, the school has to respond to revisions of the extant paradigms and new possibilities of ontological about turns culminate in all the above mentioned aspects. Given that scenario, the public education schools are always the weak link in confronting the rigidity of those unilateral decisions.

This all becomes clearly apparent when we examine the legal framework for environmental education in the school curriculum. The Federal Constitution of 1988 guaranteed the insertion of environmental education in school curriculum by means of item VI of its Article 225 which established the promotion of “environmental education at all levels of education and the raising of public awareness for the preservation of the environment” (BRASIL, 1988, our translation). Strongly influenced by the Federal Constitution the *Lei de Diretrizes e Bases da Educação* [Law of Educational Directives and Bases] (LDB) which was reformulated in 1996 (based on versions produced during the period of the military dictatorship) also guaranteed environmental education in the terms of item VII of its Article 27 which stated that “the curriculum of primary and lower and higher secondary education shall include the principles of protection, civil defense and environmental education integrated to the obligatory contents” (BRASIL, 1996, our translation).

The *Diretrizes Curriculares Nacionais* [National Curricular Guidelines] (DCNs) are another part of the legal framework that sought to organize national curricula and they also made extensive and plural provision for environmental education; their most recent version was published in 2012. In more recent years efforts have concentrated on the common curriculum within the ambit of the *Base Nacional Comum Curricular* [National Common Curriculum Base] (BNCC). Today it is the BNCC that orientates the Pedagogical Policy Projects in the Brazilian education network and it should be a reflection of the minimum contents expected to be taught in classrooms.

The BNCC formulation process was considerably dialogical, with broad participation in its first version concluded in March 2016. A second version resulted from a great deepening of the theoretical basis that the first version had been constructed on, and it involved a revision and the contributions of many specialists. It was concluded in August 2016 and is considered to be the more encompassing and interdisciplinary version. However, a change in the political scenario led to profound alterations to the conceptions of that version and a third version was brought about by a very restricted group which turned the BNCC

(BRASIL, 2017) into a retrograde document in relation to its predecessor and that is the one currently in force.

One of the areas that came under heavy attack in this third version of the BNCC was environmental education. While in the second version and had been considerably respected and considered one of the document's special themes and one that should be handled in an interdisciplinary manner, relating it to all other study disciplines and while it had been mentioned 26 times in the document, in the third version it is only mentioned once in a footnote which suggests that the PNEA (BRASIL, 1999) depends on the individual school's criterion. Again, the interdisciplinary work that the second version stimulated so strongly, is practically unconsidered in the third version; from 23 mentions, interdisciplinarity aspect drops to a mere four in the third version.

As shown above, the insertion of environmental education in the curricula is also undergoing moments of retrocession. It has lost the constitutional guarantee of its presence in national curricula due to two extremely important legal ploys. The LDB revoked the item that guaranteed its application and the BNCC stopped mentioning it as an obligatory study subject. Also revoked were the legal guarantees of the Federal Constitution and the PNEA itself that had made environmental education obligatory in schools. Government-run schools are the first to suffer the consequences of those repercussions as the corresponding financial resources are totally dependent on those policies and there is little flexibility that would allow for any countermanding or resistance to those changes.

We need to remember that environmental education is not restricted to those formal education spaces alone as it was originally conceived to be universalized. Thus, it should be present in the daily lives of all humanity. That does not mean, however that we would ignore the importance that environmental education has when it worked within a school environment given that the school's overriding goal is to foster an education committed to the integral, ethical formation of its students. Ideally, environmental education in schools should offer a significant living experience and the creation or strengthening of human bonds with nature, thereby providing a citizen-forming qualification that embraces not only ethical and aesthetic values, but also critical and reflective thinking about the world, articulating knowledge and creativity and developing skills for a better state of being in life (HOFSTATTER, 2013).

On the other hand, not every school incorporates environmental education. Furthermore, there are some very different understandings of it among environmental educators which can lead to educational practices that are merely sporadic, over-simplified or considerably decontextualized, all of which was identified in a study conducted by the Ministry of Education (MEC) in 2007.

The study, entitled *O que fazem as escolas que dizem que fazem educação Ambiental?* [What do schools that say they offer environmental education actually do?], was organized by Rachel Trajber and Patrícia Ramos Mendonça (LOUREIRO; COSSÍO, 2007).

For environmental education to effectively take place in schools in the originally intended interdisciplinary manner, it would need to be able to count on proper qualification of teachers to perform it, and that has not happened in the practice of teaching degree courses. Thus, without the necessary qualification and with no legal guarantees, environmental education, which is of fundamental importance if we are to have a society more well-prepared to respect and maintain life on our planet, now increasingly runs the risk of being cast adrift. In that polemical scenario there are authors that have come to argue in favor of including environmental education as an obligatory study discipline in primary and secondary education given its actual non-placement and the difficulty of implanting the desired interdisciplinary work in schools (CARVALHO, 2020). It is not the intention of this manuscript to linger on this issue as our essay addresses the call for ontological postures that recommend aesthetic experiences of nature in public primary and secondary education schools so that the legal framework analysis specifically focuses on the real possibilities for, and limitations to the educational insertion that we defend.

We consider the argument for the ontological discussion to be primordial insofar as even when the afore mentioned challenges have been overcome and the schools or some teachers propose carrying out environmental education activities, they have not always been sufficient to bring about the intended transformation or results. Many students in formal education have limitations to their understanding and practice of environmental education as they construct a vision notably restricted to the classroom environment and elaborated exclusively based on and via their teachers. Accordingly, they end up symbolizing/acknowledging a vision of environmental education closely associated to the schooling culture and markedly influenced by an anthropocentric and behavioral perspective of environmental education.

Conceptualization

Carvalho and Steil (2013) define ecological epistemologies as being a congruence of disciplines and theories that problematize the modern dualities and they call for approaches that take the more-than-human world into consideration. Among such theories we would emphasize that of ecophenomenology (BROWN; TOADVINE, 2003) which proposes uniting the ecological movements and philosophy. Payne (2013) and Sato (2016) transcend that philosophical

orientation for environmental education research, insofar as recent studies in that field have underscored “the importance of transcending the human dimension, of including other forms of life” (SATO, 2016, p. 14, our translation). The empirical contributions of ecophenomenology can intensify the experiencing of nature given that its basic premise that there is a world beyond the human world (PAYNE, 2013).

In the face of that set of problems, we ardently desire educational processes in environmental education directed towards aesthetic experiences which according to Iared, Oliveira and Reid (2017, p. 1274) approach the field of the affective response to the world in which the “whole body is immersed in the environment as an embodied mind, whether that is through a sensitivity and critical appreciation of being, becoming and/or experiencing nature”. According to those authors, aesthetics is defined as experimenting and engaging with~in the world, with bodily practices’ being the source and origin.

In the same perspective, Payne *et al.* (2018) suggest an eco-somo-aesthetic education in which the sensitive, affective and perceptual dimensions of the human experience predominate, situated in continuity with the more-than-human world. According to that study, the idea of ecosomoaesthetics comes from the studies of Richard Shusterman who advocates for the unity of body and mind or body and spirit and consequently, for the indissolubility of the aesthetic, ethical, cognitive and political dimensions of the human being. The *eco* prefix is a call for a less anthropocentric, or more ecocentric perspective (PAYNE *et al.*, 2018).

The number of theoretical and empirical essays addressing emotion and the sensitive has been increasing in the literature and is now considered to be a new interdisciplinary focus or “turn” that embraces various fields of academic work (CLOUGH; HALLEY, 2007; MCKENZIE, 2017). The affective turn and affect itself contemplate and exceed the more individualized conceptions of feelings and emotions insofar as they are conceived to be interactive and to incorporate intensities that circulate as *encountering forces* (SEIGWORTH; GREGG, 2010). Thus, in the present essay, we do not conceive affect as being individualized and independent of emotions and feelings but instead as “socially and culturally mediated and circulated, including in relation to other material and nonlinguistic considerations such as artifacts, aesthetics, and the more-than-human” (MCKENZIE, 2017, p. 190).

The anthropology of Tim Ingold is also considered to be one of the theories that make up the range of ecological epistemologies. Ingold (2011, 2017) conceives the education of attention as an opposer of the transmission of representations. Along that line of reasoning, Iared and Oliveira (2017, p. 105, our translation) consider that Ingold’s education of attention “refutes classic

cognitive science, seeking to involve a more phenomenological and ecological approach that leads to visceral and corporeal forms of learning”.

Education of the attention, according to Ingold (2017), flows in a creative copying process whereby the initiate would be adopting an attentional approach in relation to the elements making up the environment; in other words, from Ingold's (2017) proposal we understand that the body and the more-than-human world correspond by means of the literality of observing and perceiving in movement, a learning situation that is considerably hampered if it occurs in the form of the processes that unfold inside educational institutions. Among the various multisensory approaches, walking is the one that is increasingly gaining space in the social sciences, not merely as an alternative way of gathering data to generate interpretations of human~world relations but also to put the subjects in contact with the flows of the more-than-human world, providing opportunities for affectivities during the sensory involvement brought about by the body in movement (IARED; OLIVEIRA, 2017).

It is our understanding that the school culture does not favor creativity, far less an ecocentric engagement and that, in Brazil, they are increasingly unlikely to occur because, as has been pointed out above, the BNCC has removed environmental education and interdisciplinary work from the curriculum. Furthermore, schools accompany the current concreted model of the cities with little or no green space provision so that what can be seen, in both the curricula and the configuration of school spaces, is a formal education that is far removed from pedagogical processes that instigate other rationalities, that are committed to ethics, collectivity, affectivity, solidarity, social transformations, diversity and otherness.

Along the same line of reasoning, to get beyond the various forms of environmental education that annihilate creativities, atrophy the senses and which are founded on Cartesianism, Carvalho and Mhule (2016, p. 26, our translation) propose “outside the box” educational strategies which, according to them, are capable of overcoming the downgrading of the experience “of the capacity to reflect and of the creativities, skills that are necessary for the formation of autonomous, critical subjects”.

Thus, we perceive the need to discuss that insertion in the curriculum as our educational system is one that follows legal curricular structures. However, we also perceive that apart from the legally based curricular insertion, we urgently need to think in terms of an educational sphere that is not restricted to study contents, but which incorporates the senses, the body and relations with the spaces.

In the face of all the above, Payne and Wattachow (2009) when putting forward their proposal for a slower pedagogy, underscore the importance of allowing for pauses or as they put it, for time to “dwell in spaces for more than

a fleeting moment” which “encourages us to attach and receive meaning from that place” (PAYNE; WATTCHOW, 2009, p. 16). To those authors, the affective dimension of environmental education is able to vindicate responses to the human condition which traditionally focus on the “mind that learns” in opposition to an environmental education that is reactive to corporeality. We therefore express our confidence in the aesthetic experience with its potential for weakening those mechanisms that suffocate affectivities, subjectivities, and creativities.

In the next section we endeavor to respond to the questions raised at the beginning of this manuscript, to list the challenges facing schools in contemplating the aesthetic experience and possible ways to incorporate the aesthetic experience of nature in schooling. To that end, we have organized the discussion around three argumentative nuclei: school administration and public policies; physical space; and transversity in the curriculum.

In the middle of the way there was a stone. There was a stone in the middle of the way⁴

In his book “*Critical Social Science*”, Brian Fay (1987) postulates the existence of limits for rational change arguing that we are not just active and intellectual or rational beings, but also corporeal and affective ones and therefore involved by what he calls somatic learning. To develop his argument that author questions what students learn in schools: “intellectual and psychological skills and knowledge [...] how to think in certain ways; they learn information about their society, the natural world, and themselves” (FAY, 1987, p. 146). Three decades after that publication Brian Fay’s response to his own query remains is still just as applicable.

There are many *stones in the way* of an environmental education which in the words of Carvalho and Steil (2013), performs from a radical perspective of environmental education that thinks symmetrically the place and the status of the organisms and their activity in the world, above all because what are apparent on *ground* of the school are the materializations of opposite perspectives. Nevertheless, we have endeavored, here, to identify challenges and ways that help us to perceive which spaces it is feasible to occupy, with the understanding that when we do not have prospects that are all favorable, we must hold on strongly to what is guaranteed and push back the barriers that hem us in, and do as forms of *resisting and re-existing* and of subverting that which suffocates us (LEFF, 2016).

⁴ Poem *No Meio do Caminho* [In the middle of the way] by Carlos Drummond de Andrade.

School administration and public policies

Here we have recourse to studies addressing policy cycles (BALL; BOWE, 1992) that show us the extent to which the articulations between micro and macro-policies are not necessarily linear. In other words, “those performing functions in schools are at one and the same time subjects (submitted) and actors (agents) of the education policies” (HOJAS, 2019, p. 306, our translation). Despite the policies at federal level dismantling environmental education, there are still active links (teachers, researchers, environmentalists) who persist in defending and implementing environmental education in Brazil (BIASOLI; SORRENTINO, 2018; VIEIRA; MORAIS; CAMPOS, 2020).

In the current situation, we still have Act 9795/1999 (BRASIL, 1999), the National Environmental Education Policy which guarantees environmental education the status of a schooling practice and in spite of the removal of the guidelines concerning the practice of environmental education, the BNCC still recommends that the policy should be applied. Furthermore, if the schools and the educators have an integrative understanding of environmental education, it is possible to relate to the recommended “play” aspects of infant education or to the knowledge areas of primary and lower secondary education or to the general competencies the BNCC determines for higher secondary education. In addition, there are moments in that document when it provides for the question of human understanding in regard to the environment which opens up the possibility of working with environmental education. We would underscore however that, for it to happen when the educational policies are not emphatic, that effort is left up to the individual school or the respective teacher.

The daily round of the schools reveals one of the challenges that must be overcome to enable us, afterwards, to think about an environmental educational practice in its affective dimension. The challenge lies in the extinction of the precarious understanding that has been enabled by the sparsity of dialogue during the construction of the prescribed curricula and in the process qualifying teachers for and in environmental education. We lack debates on environmental issues linked to the socioenvironmental and cultural contexts of the students and teachers where the schools are situated; teaching-learning processes that fail to consider the place and the diverse ways of life of the practitioners of this dimension of education are still predominant.

Our understanding here is that an environmental problem cannot be addressed without considering the respective geo-epistemological questions (CANAPARO, 2009). The idea of geo-epistemology invites us to reflect on the establishment of universal pathways such as those of the Agenda 21 and the 17 Sustainable

Development Goals. Such documents postulate abstract, global practices hardly articulated at all with the geo-localized aesthetic~ethical~political realities.

We need education policies that foster environmental education practices orientated by a science that is committed to the search for knowledge of the aspects of our nature as moral beings who share the world with other beings that also need to *lead their lives*. It would not be a science that reproduces dichotomizations and dualisms for we understand this form of knowing has habituated us not only to closing our eyes (mouth, nose and ears) to its major problems, the exploitation of all the existing forms of life but has also made it impossible for us to adopt postures that acknowledge the more-than-human world as being indispensable for the maintenance of life.

In the early years 2000 the MEC institutionalized environmental education in schools via its *Conferências Infantojuvenis pelo Meio Ambiente* [Infant-Juvenile Conferences for the Environment] and the setting up of the *Comissões de Meio Ambiente e Qualidade de Vida* [Environment and Quality of Life Committees] (COM-VIDA). In 2016 the federal program *Ensino Médio Inovador* [Innovative Higher Secondary Education] was instituted, designed to achieve curricular adjustments in the form of actions to integrate the various areas of knowledge in an interdisciplinary manner. Schools that adhered to that program began to receive technical and financial support by means of the *Programa Dinheiro Direto na Escola* [Money Directly in the Schools Program] (PDDE) to enable them to elaborate and develop their *Propostas de Redesenho Curricular* [Curricular Redesigning Proposals] (PRC); in other words, proposals for activities that could be unfolded in spaces outside the schools.

While not wishing to discuss the merit of those activities, it is nevertheless pertinent to acknowledge that those programs boosted pedagogical practices that could engage the subjects with~in nature; an aspect indispensable for bringing us closer to what Williges (2018) refers to as *cognição corporificada* [“corporeality” cognition] and the same author holds that bodily practices are constituent in cognitive and moral processes; in other words, “they can only be acquired in a *physically lived interaction* with the exterior world, of the kind that can be found when bathing in a lake or climbing rocks or mountains” (WILLIGES, 2018, p. 7, our translation, our emphasis). However, the silencing of environmental education in public policies (FRIZZO; CARVALHO, 2018) has undoubtedly further weakened the possibilities for environmental practices permeated by ethical and aesthetic values such as would foster an ontological turn.

It is important to have a clear understanding of the tension between public policies and the school *ground*. When better material and human conditions are made available to the school for educational proposals that are free of the usual technicist and developmentalist canons, then creativity, autonomy

and collective values brought about by the various school practices become apparent. To sum up, what can be seen today is the environmental education professional acting in the breaches. The discussions on environmental themes do not just extrapolate the confines of the school walls but also conservative ways of treating the environment.

Thus, we can see that the insertion of the school environmental education that we deem to be necessary permeates various issues ranging from the qualification of the teachers and incentives for them, to the formulation of adequate education policies and embracing the return of more progressive and inclusive normative documents for the curricula that above all take into consideration in the learning, the various different human spheres and not just “content”. However, we must also have a society that understands the need for all of that; one that desires change and, above all, one that positions itself in the school’s administrative and political participation spaces.

We argue that in addition to guaranteeing the explicit legal return of environmental education to the documents that regulate national education, there must be a review and/or the reinvention of school environmental education so that it may claim, not only its proper place but also an ecocentric perspective in the way it is defended in the *Conceptualization* section above.

Physical Space

McClaren (2009 p. 301) makes a broad defense of the occupation of the city as a form of learning and correlated with formal schooling when he states that “given the importance of urban environments in our experience, it is strange how little attention we pay to this environment in school programs”. That environment of sociability and circulation between school and city is so vital and affective that the moment of pandemic that we are living through has shown us just how much we need to be meeting people and the school life experiences.

To back his argument McClaren (2009) proposes an education in the real environments of life, reasoning that although environmental educators often defend the importance of reconnecting human beings with nature in places where there is no human *interference* it must be remembered that most people live in urban environments and can experience the *inter-action* (RODRIGUES, 2019) with places or with other species in the place that they inhabit because their life stories are based on those environments. Thus, he argues in favor of a school education based on empathy and which appropriates the urban narratives; citing Suzuki (2003 *apud* MCCLAREN, 2009, p. 294) he also states that “if children grow up understanding that we too are animals they will view other species with a sense of communion and community”.

Returning to Brian Fay (1987, p. 146), that author problematizes the superficiality of a school that only concerns itself with the intellect: “close attention to the physicality of schools reveals that the learning that goes on in them involves the physical bodies of students and teachers as much as their minds”. He questions the configuration and organization of school spaces that control the bodies and bodily movements: long narrow corridors, desks arranged in rows that only allow for a view of the teacher, regulated periods for classes, conversations and leisure and how the movements of the bodies come to be standardized according to certain regulations. The school needs to be physically and corporeally explored in every corner and every (horizontal and vertical) direction: the green areas, the squares the school patios, the pavement, the nearby square, the sky, the sun. To that end we clamor for the reinvention of school buildings and their surroundings.

Transversity in the curriculum

Environmental education also needs to occupy Geography, the Arts and Physical Education. There are many studies (CARNEIRO, 2002; RIZZI; ANJOS, 2010; RODRIGUES, 2014, for example) revealing how much those study disciplines contribute corporeal, engaged, affective experiences with the more-than-human world. Biology could come out from its purely technical aspects of the study of life and consider more sensitive aspects. For example, studying birds could include listening to the birdsongs. Studying the trees and the soil could involve the sense of smell allowing the students to sense the scents (BASTOS, 2020).

History and Portuguese would embrace the more-than-human world in the flow of materials during their respective narratives, stories, music and literature. In her research, Hofstatter (2018) shows how much pleasure people feel when involving the senses in educational practices, in getting to know stories. Mathematics, physics and chemistry must *bring things back to life* (INGOLD, 2012). Quantum physics has been revolutionizing scientific presuppositions insofar as it contests subject-object distancing and/or neutrality (LIN *et al.*, 2021).

In addition, it is entirely coherent to take a closer look at the potential of informal environmental education, that which occurs spontaneously during the personal interactions, as in the school breaks for example, those moments are drivers of happiness, imagination, improvisation, creativity and criticality. A school that values those lived moments will provide patios full of trees, with welcoming benches to rest on for contemplation and conversation as such environments are less supervised, less regulated and they foster rich and

consistent memories and impacts in the *itinerations* (INGOLD, 2012)⁵ between educators and students, and the more-than-human world.

Cognitivism is not exclusively the product of an intellect or a mind that thinks but also of the emotive, corporeal and perceptive dispositions that translate into skills, habits and arrangements of the body (FAY, 1987; WILLIGES, 2018). Public policies on environmental education need to let the emotions, the performance and the dispositions of the humans and more than humans achieve expression.

There is already a debate in course on how environmental education needs to become more attentional and spontaneous (CARVALHO; MHULE, 2016; IARED; OLIVEIRA, 2017; QUALHO; IARED, 2021). The respective studies are based on the concept of the education of attention (INGOLD, 2010) which, succinctly, can be defined as a fine attunement between the individual's perceptive system and the world, as a guided rediscovering in which the novice learns to capture and imitate the movements of the experienced ones. That process, which involves observing, copying and improvising is done in a relationship of correspondence in which there is no dichotomy between observing and participating, hearing and speaking, because "I align the movement of my attention in such a way that it resonates with that of your action" (INGOLD, 2010, p. 22, our translation).

From the education of attention proposed by Tim Ingold (2010), we understand that human education is no longer given by an externality of the subject to the environment but instead, in the *itinerations* of a person with his or her surroundings, involved in specific structures of attention and response. After all, according to that anthropologist, knowing

[...] does lie in the relations between structures in the world and structures in the mind but is immanent to the life and consciousness of the knower as it unfolds in the field of practice – the *taskscape* – established through his or her presence as a being-in-the-world (INGOLD, 2010, p. 21, our translation, author's emphasis).

Would it not be possible to materialize the education of attention during a sunset, while listening to birdsong and the sound of the wind, perceiving the

⁵ Tim Ingold opts for the term *itineration* rather than *interaction* or *connection*. For the author, *itineration* refers to the idea of following, corresponding, responding to one another along the way, while *connection* and *interaction* involve the reproduction and "reduction of things to objects, and from life to agency" (INGOLD, 2012, p. 37, our translation).

scent of the rain, the shapes of the clouds, the beating of a bird or an insect's wings and the movements of the flowers, within the school walls?

Lastly, let us be capable, in the tangles of life, of bringing lightness, color, aromas, textures, knowledge and sounds to the physical structures of the educational institutions, to science, to the curriculum and to our daily lives. We need to align ourselves with the movement of the more-than-human world, to throb and flow together with it, allow affectivities, feelings, and sensations to spill out and overflow. Remembering that the BNCC has reduced the importance of interdisciplinary work and removed environmental education we would underscore how much environmental education needs to take back its place in the schooling debate and in turn, the aesthetic experience and the more-than-human world need to occupy their place in the flow of things that involve environmental education.

You, who writes verses, who loves, protests. What now José?⁶

We have endeavored, in this manuscript, to present the current set of problems affecting environmental education and to do so against the background of the respective legal provisions and from a schooling perspective. We understand that even in the face of the many difficulties we cannot fail to continue acting because our school, city and country cannot wait for the time it takes for us to settle our political social and political conflicts. Those who can see the direction we are heading in are afflicted and realize the importance of rapid responses. Environmental education is not the redeemer of humanity, but it can certainly help human beings to position themselves better in life and when it is offered from the perspective of values it can contribute towards a better affective and ethical response.

Our role is therefore, to observe and understand the current set of circumstances and act according to the extant possibilities. As in the reference to Carlos Drummond de Andrade's verses, we make "verses and we love", for we believe in our ideals and our force for driving affect. At the same time, we must not neglect indignation and permanent vigilance to ensure we have the legal guarantees for the existence of our institutional schooling spaces.

In his preface to the book "*Pedagogia da Esperança*" [Pedagogy of Hope] by the patron of Brazilian education, Paulo Freire (2013), Leonardo Boff (2013) reminds us of the human capacity to *desfatarizar* [make non-inevitable] this perverse situation and construct a future that is ethically fairer, politically more

⁶ From the poem *José*, by Carlos Drummond de Andrade.

democratic, aesthetically more radiant, and spiritually more humanizing. It is in this sense that Paulo Freire (2013) talks about hope, about the viable untried and about the continuation of the struggle to construct the desired society.

Thus, if it is indeed necessary to make new efforts and construct strategies to ensure that environmental education returns to occupy, more emphatically, the schooling regulatory documents then why should we not reexamine the way we want to implant it and the kind of education we actually want? It could be an unparalleled moment for reviewing and evaluating advances and identifying what needs to be abandoned in the (re) construction of what we hope for from this sphere of education.

In a now-famous phrase, American professor David Sobel (*apud* MACHADO, 2021, our translation), referring to children, said “Let us allow them to love the Earth before we ask them to save it”. That echoes our own argument that the experiences in nature offer possibilities for creating political engagement. However, if we state that the school is not detached from society and adhere to a legal curricular structure, then that political engagement will not be possible unless we immediately take up once more the insertion of environmental education and interdisciplinary work in the curricula. That obviously also requires a society that exercises greater political participation and adopts positions that favor having our education policies follow a more progressivist and ethical course.

The basic question underlying the discussion of school administration pathways and obstacles and public policies, of physical space and transversity in the curricula is the call for an ontological turn that would destabilize our presuppositions regarding our relations with the more-than-human world. That could be extremely transforming and critical for our entering into the radicality of human~more than human relations.

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