

## Environmental education and Brazilian public educational policies

*A educação ambiental e as políticas públicas educacionais brasileiras*

*Educación ambiental y políticas educativas públicas brasileñas*

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**Abstract:** This study examined the place assigned to environmental education (EE) in the Constitution and in Brazilian education laws currently in force. The Federal Constitution and the National Environmental Education Policy (PNEA) recognize EE as an essential, permanent component of national education, with the State responsible for ensuring its integrated provision at all levels and in all educational modalities. However, the National Common Curricular Base (BNCC) and the amendment to the National Education Guidelines and Framework Law (LDBEN) introduced by Law No. 14,945/2024 have made its explicit curricular presence more flexible. Conversely, the new National Education Plan (PNE) provides, in Strategy 5.3, for implementation of environmental education curriculum guidelines and, in Objective 8, for its integration with climate change action, teacher education, school infrastructure, and community participation. Its effectiveness, however, depends on incorporating targets and strategies into subnational plans, pedagogical projects, and funding and teacher education policies.

**Keywords:** Critical Environmental Education; Educational Policies; PNEA; LDBEN; BNCC.

**Resumo:** Este estudo analisou o espaço atribuído à educação ambiental (EA) na Constituição e nas principais legislações educacionais brasileiras vigentes. A Constituição Federal e a Política Nacional de Educação Ambiental (PNEA) reconhecem a EA como componente essencial e permanente da educação nacional, cabendo ao Estado assegurá-la de forma articulada em todos os níveis e modalidades de ensino. Contudo, a Base Nacional Comum Curricular (BNCC) e a alteração da Lei de Diretrizes e Bases da Educação Nacional (LDBEN) pela Lei nº 14.945/2024 flexibilizaram sua presença curricular explícita. Em contraponto, o novo Plano Nacional de Educação (PNE) prevê, na Estratégia 5.3, a implementação das diretrizes curriculares de educação ambiental e, no Objetivo 8, sua articulação com o enfrentamento das mudanças climáticas, a formação docente, a infraestrutura escolar e a participação comunitária. Porém, sua efetividade depende da incorporação de metas e estratégias aos planos subnacionais, projetos político-pedagógicos e políticas de financiamento e formação docente.

**Palavras-chave:** Educação Ambiental Crítica; Políticas Educacionais; PNEA; LDBEN; BNCC.

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**Resumen:** Este estudio analizó el lugar atribuido a la educación ambiental (EA) en la Constitución y en las principales legislaciones educativas brasileñas vigentes. La Constitución Federal y la Política Nacional de Educación Ambiental (PNEA) reconocen la EA como un componente esencial y permanente de la educación nacional, correspondiendo al Estado garantizarla de manera articulada en todos los niveles y modalidades de enseñanza. Sin embargo, la Base Nacional Común Curricular (BNCC) y la modificación de la Ley de Directrices y Bases de la Educación Nacional (LDBEN) mediante la Ley n.º 14.945/2024 flexibilizaron su presencia curricular explícita. En contraste, el nuevo Plan Nacional de Educación (PNE) establece, en la Estrategia 5.3, la implementación de las directrices curriculares de educación ambiental y, en el Objetivo 8, su articulación con la lucha contra el cambio climático, la formación docente, la infraestructura escolar y la participación comunitaria. No obstante, su efectividad depende de incorporar metas y estrategias en los planes subnacionales, proyectos político-pedagógicos y políticas de financiamiento y formación docente.

**Palabras clave:** Educación Ambiental Crítica; Políticas Educativas; PNEA; LDBEN; BNCC.

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## Introduction

The unprecedented socio-environmental crisis in the planet's history is an urgent global threat that transcends geographical borders and affects practically every biotic and abiotic aspect of life on Earth.

The unbridled exploitation of natural resources, deforestation, wildfires, and the pollution of land, water, and air have an increasingly negative effect on quality of life and on the sustainability of ecosystems. All of this compromises biodiversity and contributes to the alarming decline of thousands of species, as well as to hunger, poverty, and the absence of guaranteed basic conditions for survival.

Growing concern over climate change stands out as the most pressing environmental issue in global surveys, producing direct impacts on public health and reflecting the urgency of action to mitigate global warming. According to the *World Health Organization*, a United Nations agency, climate change is expected to cause approximately 250,000 additional deaths per year between 2030 and 2050, owing to problems such as malnutrition, malaria, diarrhoea, and heat stress (World Health Organization, 2024).

In this context, considering that our development model simultaneously produces degradation affecting both society and the environment (Lima, 2009), we are living through a widespread socio-environmental crisis that exposes the socially and environmentally unsustainable character of the capitalist mode of production, predominantly based on an

excess of resources for a few and a lack of resources for the majority. If, on the one hand, we are faced with the overproduction and overconsumption of one portion of the population, on the other we observe the underconsumption and the insufficient conditions of production of an even larger portion (Brasil, 1992).

Faced with this scenario, Carvalho (2006, 2015) points to an apparent consensus among the various social sectors regarding the recognition of the educational process as a tool capable of bringing about transformations and changing the current state of worldwide socio-environmental degradation.

Starting from the premise of the Treaty on Environmental Education for Sustainable Societies and Global Responsibility, according to which environmental education (EE) should foster the formation of socially just and ecologically balanced societies that maintain relations of interdependence and diversity among themselves (Brasil, 1992), it is not possible to conceive of environmental problems as separate from social conflicts.

After all, the environmental crisis does not express problems of nature but problems that manifest themselves in nature, originating in social relations and in the prevailing models of society and development (Layrargues; Lima, 2014). A solid socio-environmental education is oriented towards an equitable sustainability, grounded in respect for all forms of life and in values and actions that contribute to human and social transformation as well as to ecological preservation. This process requires, beyond individual responsibility, collective responsibility and political participation.

This study starts from the assumption that the environmental crisis is inseparable from social relations and from the current development model, which is why EE must go beyond a conservationist or pragmatic view and take on a critical character that allows the contradictions of the capitalist system and their socio-environmental implications to be understood.

Along these lines, analysing the legislation in force is important for following the principles that guide educational practices related to environmental issues, making it possible to reflect on and, where necessary, reformulate effective public policies. This study therefore sought to analyse the place assigned to environmental education in the Constitution and in the main Brazilian education laws currently in force.

This work adopted a qualitative approach and consisted of bibliographical and documentary research, whose main objects of study were the Constitution of the Federative Republic of Brazil, the National Environmental Education Policy (PNEA), the National Education Guidelines and Framework Law (LDBEN), the National Curriculum Parameters – Environment (PCNs), the National Curriculum Guidelines for Environmental Education

(DCNEA), the National Common Curricular Base (BNCC), and the National Education Plan (PNE), approved by Law No. 15,388 of 14 April 2026.

The text is organised into the following sections: an introduction, which presents an overview of the socio-environmental crisis; a second section, which analyses the socio-environmental crisis as a global emergency; a third, which describes the trajectory of environmental education in Brazil; a fourth, which sets out the political-pedagogical macro-tendencies of environmental education; a fifth, devoted to Brazilian legislation on environmental education; and, finally, the closing remarks.

### **The socio-environmental crisis as a global emergency**

If we regard nature solely as a biogeophysical space, that is, if we reduce its complexity to the material and scientific dimension, distinguishing it merely as a set of interconnected physical, chemical, and biological elements without considering the cultural, symbolic, historical, and social aspects that also define it, we might say that environmental problems have occurred since the first forms of life on Earth, and particularly since the emergence of the human species.

The first human beings, owing to their greater capacity to alter the environment compared with other species, already practised some level of exploitation of natural environments and landscapes in their struggle for survival and for the maintenance of their offspring. This phenomenon intensified as they shifted from nomadic to sedentary habits, above all with the advent of agriculture, herding, fixed constructions, and other exclusively human activities that were unprecedented until then.

With the advent of the Industrial Revolution, the effects of human intervention in the natural world intensified. The replacement of manufacture by industrial production, the worsening of environmental pollution arising from the burning of fossil fuels, and the change in the pattern of consumption towards larger-scale, lower-cost production contributed to consolidating scenarios of environmental devastation throughout the world (Williams, 2015).

Accordingly, since the Industrial Revolution, and especially after the intense transformation brought about by the Great Acceleration, set in motion by the consolidation of the consumer society during the Golden Years of capitalism in the 1950s, the concentration of greenhouse gases, such as carbon dioxide (CO<sub>2</sub>) and methane (CH<sub>4</sub>), has been rising alarmingly and continuously. These gases result above all from the burning of oil, coal, and natural gas for energy generation and are directly related to the capitalist model of industrial

development. The increase in their concentration, in turn, retains more heat from solar radiation and warms the atmosphere (Layrargues; Sato, 2024).

The global climate system is extremely sensitive, so that seemingly small variations, such as a rise of just one degree Celsius in the planet's average temperature, can trigger devastating impacts on the processes that sustain life in the biosphere. These changes not only put biodiversity at risk but also seriously affect human populations in conditions of environmental vulnerability, exposing them to extreme climate events and growing instability. Among the countless global environmental challenges, climate change stands out as one of the most urgent and serious issues, demanding priority attention and immediate action (Layrargues; Sato, 2024).

Chomsky and Pollin (2020) make clear that, since the origins of civilised social order, the human species has faced a vast range of severe challenges and deadly threats, such as waves of famine, natural disasters, wars, slavery, and pandemics. The authors argue, however, that in climate change humanity faces its greatest existential crisis of all time.

According to a study by the Brazilian Alliance for Ocean Literacy, 64,280 extreme climate events have been recorded in Brazil since 1991, with an average increase of 100 records per year. Examining the period between 1991 and 2023, the study indicates that climate disasters in the country rose by 250% over the last four years compared with the 1990s (Exame, 2024).

Consistent with these alarming data, in April and May 2024 the state of Rio Grande do Sul experienced the greatest climate tragedy in its history. Over the course of a month, floods struck 471 cities, caused the deaths of more than 170 people, left entire neighbourhoods submerged, and drove approximately 630,000 people from their homes (G1 Rio Grande do Sul, 2024).

Environmental tragedies such as the floods in Rio Grande do Sul, the collapse of the Fundão dam in Mariana, Minas Gerais, and the collapse of the Córrego do Feijão Mine dam in Brumadinho, Minas Gerais, lay bare environmental problems. Above all, they shed light on the social, political, and economic context that is inseparable from the environmental question, and they reflect the prevailing capitalist mode of production: a predatory and unsustainable system that allocates the "costs of development" disproportionately to groups in situations of social and environmental vulnerability.

## **The trajectory of environmental education in Brazil**

The Constitution of the Federative Republic of Brazil, in Article 225, provides:

Everyone has the right to an ecologically balanced environment, a public good for the people's common use and essential to a healthy quality of life, imposing on the Government and the community the duty to defend and preserve it for present and future generations (Brasil, 1988, p. 137).

To ensure the effectiveness of this right, the Constitution further states that it is incumbent upon the Government to “promote environmental education at all levels of education and public awareness for the preservation of the environment” (Brasil, 1988, p. 137).

Popular awareness of the consequences of environmental degradation began in the late 1960s and early 1970s, when various social groups from different regions of the world turned their attention to environmental problems. This global perception set in motion a process of seeking to understand the patterns of the society–nature relationship, the causes that define these patterns, and the strategies for mitigating or solving environmental problems (Carvalho, 2006). In this context, Carvalho (2006) points to a strong tendency among the different social sectors to recognise the educational process as a possibility for bringing about change and altering the current state of environmental degradation.

Historically, EE became consolidated in Brazil from the 1970s and 1980s onwards, through initiatives promoted by governmental institutions linked to the environment. During this period, a conservationist approach predominated, technicist and behaviourist in character and focused on the teaching of ecology, as observed by Lima (2009).

This hegemonic perspective was functional to the dominant political and economic institutions, since it treated the environmental question from a natural and technical standpoint, avoiding deeper questioning of the established social order, which served the interests of the military dictatorship. Thus, under a supposed ideological neutrality, conservationism refrained from problematising the political, economic, and ethical aspects of environmental issues, allowing the environmental question to be assimilated peacefully, without major ruptures or structural changes (Lima, 2005).

With the redemocratisation of Brazil, begun in the second half of the 1980s, a more favourable setting emerged for dialogue between environmentalist organisations and social movements. In this context, Lima (2009) observes that environmental and social issues began to be recognised as complementary. Environmental degradation and social problems came to be understood as consequences of the same development model, which perpetuated inequalities and disproportionately penalised the poorest, negatively affecting their quality of life.

During the Second United Nations Conference on Environment and Development (Eco-92), the Treaty on Environmental Education for Sustainable Societies and Global Responsibility, a document signed collectively by environmental educators and others involved with environmental issues from various countries, affirmed the global commitment that environmental education should foster the formation of socially just and ecologically balanced societies (Brasil, 1992).



Thus, besides EE being mandatory at all levels of education since the 1988 Constitution, for more than thirty years there has been a strong aspiration that it should encompass the historical, political, economic, and social aspects that are inseparable from environmental issues.

Brazilian environmental education is structured by a hierarchical set of norms, running from the Constitution to ordinary sectoral laws, which define principles, duties of the State, and curriculum guidelines. Under this legislation, EE is regulated chiefly by Law No. 9,795/1999, known as the National Environmental Education Policy (PNEA), which establishes the guidelines and bases for EE in Brazil and defines its principles, objectives, strategies, and instruments. In the PNEA, environmental education is defined as:

Article 1. Environmental education is understood as the processes by which the individual and the collectivity build social values, knowledge, skills, attitudes, and competences directed towards the conservation of the environment, a public good for the people's common use, essential to a healthy quality of life and its sustainability (Brasil, 1999, p. 1).

Despite this apparent linearity of conceptions, EE does not constitute a homogeneous field of knowledge and pedagogical practices. It is a broad and diversified field that supports different perspectives and readings of the world and, consequently, gives rise to distinct educational processes that may dialogue with or even oppose one another.

### **The political-pedagogical macro-tendencies of environmental education**

It is important to stress that educational approaches display distinct characteristics, closely tied to the perspective adopted in relation to education, the human being, society, and nature. Therefore, even though EE today involves a diversity of participants and social institutions that share fundamental principles and norms, there are variations in their conceptions of the environmental question and in the strategies proposed for confronting environmental problems.

When environmental education is analysed from the perspective of the Social Field<sup>3</sup>, Layrargues and Lima (2014) state that it is made up of a diversity of social actors and institutions that share a core of common values and norms. These actors, however, present

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<sup>3</sup> For Pierre Bourdieu, the Social Field is a space of relations between agents who occupy distinct conceptual and political positions and dispute the rules, values, and forms of recognition within a given social universe. In it, relations of domination, subordination, and adherence are mediated by ideological strategies geared towards the conservation or the subversion of the established order (Layrargues; Lima, 2014).

significant differences in their conceptions of the environmental question, as well as in the political, pedagogical, and epistemological proposals they defend for dealing with environmental problems.

Within this field, different social groups dispute hegemony, seeking to steer it according to their interpretations of reality and their interests. These disputes reflect a tension between conservative tendencies, geared towards maintaining the *status quo*, and transformative tendencies, which propose changes in social relations and in society's interaction with the environment.

Accordingly, several authors, accepting the risks implicit in any attempt to classify inherently complex realities such as environmental education, have proposed that EE is made up of different political-pedagogical currents that guide the knowledge and educational practices developed.

The first attempt to classify the internal currents of EE in Brazil was probably made by the researcher Marcos Sorrentino (1995), who, in his doctoral thesis, identified four strands: conservationist, outdoor education, environmental management, and ecological economics (Sorrentino, 1995). The researcher Lucie Sauv  , in turn, refers to fifteen currents of EE, namely: naturalist, conservationist/resourceist, problem-solving, systemic, scientific, humanist, moral/ethical, holistic, bioregionalist, praxic, critical, feminist, ethnographic, eco-education, and sustainability (Sauv  , 2005).

The researchers Philippe Layrargues and Gustavo Lima have proposed that EE in Brazil can be identified, in political-pedagogical terms, by three main macro-tendencies: conservationist, pragmatic, and critical (Layrargues; Lima, 2014). It is important to recognise that, although there is a certain consensus that these are currently the three main perspectives constituting the field, the boundaries between them are not so absolute and there are significant internal nuances within each one (Loureiro, 2022).

The conservationist macro-tendency is based predominantly on ecological principles and on the promotion of individual behavioural change in relation to the environment. This approach is characterised as conservative, since it does not question existing social structures.

The pragmatic macro-tendency, in turn, encompasses the strands of Education for Sustainable Development and Education for Sustainable Consumption. This perspective views the environment as a set of natural resources in the process of depletion, but does not discuss the unequal distribution of the costs and benefits associated with development processes.



Finally, the critical macro-tendency proposes an in-depth critical analysis of the logic of human domination and of the mechanisms of capital accumulation. This approach seeks to confront socio-environmental inequalities and injustices by contextualising and politicising the environmental debate, problematising the contradictions inherent in development models and social structures (Layrargues; Lima, 2014).

Within critical environmental education, the perspective that guides this study, the critique is directed at the capitalist system of production. The understanding is that this hegemonic model, by depending ever more on predatory practices involving the use of soil, water, and non-renewable energy sources, has reached its limits, both materially and socially (Trein, 2012). According to Layrargues, Puggian, and Menezes (2020), it is an intrinsically unsustainable model, in so far as it prioritises the exploitation of environmental resources for the production of consumer goods rather than for the survival of human groups.

### **Brazilian legislation on environmental education**

In the current global scenario of socio-environmental crisis, it is necessary to pursue a critical environmental education that brings socio-environmental inequalities and injustices out of invisibility and that, before thinking of future generations, fights first for the survival of the groups living today on the margins of society, who coexist closely and in profoundly unequal ways with environmental degradation.

Currently, environmental education in Brazil is established by various laws and public policies that regulate the subject in different areas and sectors. According to the Constitution of the Federative Republic of Brazil, in Chapter VI, which deals with the environment, it is incumbent upon the State to guarantee EE at all levels of education:

Article 225. Everyone has the right to an ecologically balanced environment, a public good for the people's common use and essential to a healthy quality of life, imposing on the Government and the community the duty to defend and preserve it for present and future generations.

§ 1. To ensure the effectiveness of this right, it is incumbent upon the Government to: [...]

VI – promote environmental education at all levels of education and public awareness for the preservation of the environment (Brasil, 1988, p. 140).

The PNEA further establishes that environmental education is an essential and permanent component of national education, a right of all, to be implemented not as a specific subject in the school curriculum but in an integrated way, at all levels and in all educational

modalities, in both formal and non-formal settings. In addition, the environmental dimension must also appear in the curricula of initial and continuing teacher education (Brasil, 1999).

As regards the objectives of EE, the PNEA was supplemented by Law No. 14,926 of 17 July 2024 (Brasil, 2024a), in order to ensure attention to climate change, the protection of biodiversity, and the risks and vulnerabilities to socio-environmental disasters within the scope of the PNEA. As a result, these issues now form part of the objectives of environmental education in the country:

Article 5. The fundamental objectives of environmental education are:  
[...]

VIII – the encouragement of individual and collective participation, including that of schools at all levels of education, in actions of prevention, mitigation, and adaptation related to climate change and to halting the loss of biodiversity, as well as in education directed at the perception of risks and vulnerabilities to socio-environmental disasters;

IX – assistance in achieving the objectives of the National Environment Policy, the National Policy on Climate Change, the National Biodiversity Policy, the National Civil Protection and Defence Policy, the National Environmental Education Programme, and the National Curriculum Guidelines for Environmental Education, among others directed at improving living conditions and environmental quality (Brasil, 1999, p. 2).

With a view to regulating the PNEA, Decree No. 4,281/2002 establishes the responsibilities of governmental bodies, educational institutions, and civil society organisations in promoting EE in the country. The Decree reaffirms the need to include EE at all levels and in all educational modalities, integrating it into the curriculum subjects in a transversal, continuous, and permanent manner (Brasil, 2002). In addition, in conjunction with the PNEA, the National Solid Waste Policy (PNRS), established by Law No. 12,305 of 2 August 2010, sets out EE as one of its instruments for the integrated management of solid waste, seeking to promote, within society, the non-generation, reduction, reuse, and recycling of such waste (Brasil, 2010).

On the other hand, with regard to Law No. 9,394 of 20 December 1996, the National Education Guidelines and Framework Law (LDBEN), a recent change can be observed in the wording of its Article 26, § 7. Until then, this provision established the mandatory inclusion of EE in school curricula, in a transversal manner, as a transdisciplinary theme. Consider the following:

Article 26. The curricula of early childhood education, primary education, and secondary education must have a common national base, to be complemented, in each education system and in each school, by a diversified part required by the regional and local characteristics of society, culture, the economy, and the students.

[...]

**§ 7. The curricula of primary and secondary education must include the principles of civil protection and defence and environmental education, integrated into the mandatory content.** [former wording]

**§ 7. Curricular completion may include, at the discretion of the education systems, projects and research involving cross-cutting themes that make up the curricula referred to in the caput of this article.** [current wording] (Brasil, 1996, p. 14-16, emphasis added).

The change was introduced by Law No. 14,945 of 31 July 2024 (Brasil, 2024b) which, although it announces the aim of amending the LDBEN in order to define guidelines for secondary education, establishes changes for the whole of basic education.

The previous wording of § 7 provided that the curricula of primary and secondary education should include, integrated into the mandatory content, the principles of civil protection and defence and environmental education. This formulation made clear the obligation to treat EE as a structural part of the curriculum, guaranteeing its explicit and systematic presence. Moreover, by linking it to the mandatory content, it promoted an interdisciplinary and integrated approach, encouraging the theme to be addressed transversally and to run across various areas of knowledge.

The mandatory status sought to ensure that all students came into contact with concepts and practices geared towards environmental protection, fostering the development of a systemic view and of critical thinking about environmental issues. Furthermore, integrating EE into the mandatory content facilitated its alignment with national education objectives.

The current wording replaces the mandatory status with the possibility for education systems, at their discretion, to include projects and research involving cross-cutting themes, which may or may not include EE. Instead of an explicit and mandatory integration, the new formulation makes the decision more flexible, allowing education systems to choose whether or not to address environmental education as a cross-cutting theme.

The change grants greater autonomy to education systems, but it runs the risk of resulting in omissions, especially in contexts where EE is not regarded as a priority. EE ceases to be a structuring component and comes to depend on the initiative of each institution or education system. Without the mandatory status, the possibility of regional inequalities in the treatment of the theme increases, harming the environmental education of students in areas with less mobilisation around environmental issues.

In contrast to this loosening, Law No. 15,388 of 14 April 2026, which approves the new National Education Plan (PNE), restores environmental education to an explicit

position in the ten-year educational planning. Strategy 5.3, linked to Objective 5, provides for ensuring the implementation of the curriculum guidelines for Education on Ethnic-Racial Relations, Human Rights Education, and Environmental Education, in line with the cross-cutting-theme approaches of the BNCC (Brasil, 2026). In stating this obligation, the PNE reaffirms the need for environmental education to be part of curricula and pedagogical proposals in articulation with other formative fields committed to democracy, human rights, and the confronting of inequalities.

In addition, Objective 8, entitled Socio-environmental Sustainability in Education, sets as its purpose the promotion of environmental education and the confronting of climate change in all educational establishments. Its targets determine that, by the fifth year of validity, at least 60% of education networks should develop and implement plans for climate prevention, mitigation, and adaptation, and that, by the end of the decade, all networks should do so; they also provide for guaranteeing thermal comfort in all educational establishments and for promoting environmental education in all institutions, grounded in the PNEA and in the national curriculum guidelines of the National Education Council (Brasil, 2026).

In the 25 strategies of Objective 8, the PNE links the curricular dimension of environmental education to the material, pedagogical, and institutional conditions for socio-environmental sustainability. The provisions include actions on funding; the rational use, capture, and reuse of water; energy efficiency; solid waste management; the expansion of green areas; protocols for the prevention of and response to climate emergencies; teaching materials; transversality across areas of knowledge; initial and continuing education, research, extension, and postgraduate studies; the creation of environment and quality-of-life committees; and the application of resources from the National Fund on Climate Change in public educational institutions. Such breadth represents an advance in recognising that a critical environmental education is not reduced to the transmission of content or to the alteration of individual behaviours, but requires public policies, infrastructure, community participation, and funding. The effectiveness of these provisions, however, will depend on their incorporation into the state, district, and municipal education plans, into the political-pedagogical projects, and into the educational action plans provided for in the law itself.

Besides the LDBEN and the new PNE, the National Common Curricular Base (BNCC) constitutes a central normative reference for Brazilian basic education, since it defines the essential learning that all students must develop throughout the stages and modalities of basic education.

Although the BNCC for the stages of Early Childhood Education and Primary Education was ratified by the Ministry of Education (MEC) on 20 December 2017, and that for Secondary Education on 14 December 2018, the existence of a National Common Curricular Base was already provided for by the Constitution of the Federative Republic of Brazil, promulgated in 1988. Its Article 210 provides: “Article 210. Minimum content shall be established for primary education, so as to ensure a common basic formation and respect for cultural and artistic values, both national and regional” (Brasil, 1988, p. 124).

Another historical milestone in the development of the BNCC came with the approval of the LDBEN in 1996, which regulated school education and, in its Article 26, provided for a common national base for Basic Education, as in the passage of the law already cited in the previous section.

In the timeline of the documents related to the development of the BNCC, the following stand out: the National Curriculum Parameters (PCNs), consolidated in 1997, 1998, and 2000, which are guidelines drawn up by the Federal Government to orient education in Brazil; the new National Curriculum Guidelines (DCNs), published in 2010 and 2012, oriented towards curriculum planning for schools and education systems; the National Education Plan (PNE) then in force, established by Law No. 13,005 of 2014, which brought together 20 targets to improve the quality of Basic Education, four of which referred to the BNCC; Ordinance No. 592 of 17 June 2015, which set up the committee of specialists to draft the BNCC proposal; and, finally, the three versions of the document, drawn up from October 2015 onwards, submitted to public consultation for contributions from civil society, organisations, and scientific bodies, and finalised in April 2017 (Avamec, 2022).

The PCNs – Environment, published in 1997, incorporate environmental education as a Cross-cutting Theme, proposing that it be worked on in an interdisciplinary and continuous way across the different areas of the curriculum, and not only in Science. The document broadens the notion of the environment by relating nature, society, culture, the economy, and quality of life, seeking to form students capable of understanding and taking part in confronting socio-environmental problems. Although they represent an advance in valuing citizenship, participation, and contextualised practices, the PCNs may favour approaches centred on individual attitudes, such as recycling and resource conservation, when they do not deepen debates on inequalities, socio-environmental conflicts, consumption, and power relations. Moreover, transversality depends on collective planning and teacher education if it is not to result in isolated actions or in the invisibilisation of the theme in the curriculum (Brasil, 1997).

The National Curriculum Guidelines for Environmental Education (DCNEA), established in 2012, consolidate environmental education as a permanent dimension integrated into national education, which must be present in curricula, political-pedagogical projects, school management, teacher education, research, and extension. Unlike merely ecological or behavioural approaches, the Guidelines defend a critical perspective that relates the environment to socio-environmental justice, inequalities, work, consumption, health, diversity, and democratic participation. They propose that environmental education be developed in a continuous, interdisciplinary, and transversal manner, avoiding its reduction to isolated actions such as recycling or the commemoration of environmental dates. Their main challenge is to guarantee real conditions for implementation, including teacher education, collective planning, institutional support, and school practices consistent with the construction of sustainable educating spaces (Brasil, 2012).

The BNCC sets out to establish the competences and skills that students must develop throughout each stage of basic education, from early childhood education to secondary education, guiding the development of school curricula by states and municipalities so as to ensure that they are aligned with the objectives and principles of Basic Education in Brazil. It is a set of knowledge established as indispensable for all students over the course of their schooling, regardless of their origin, social class, or place of study.

The implementation of the BNCC is still under way in the country. If, on the one hand, it is regarded as an important instrument for guaranteeing equity and quality in education, by seeking to ensure that all students have access to the same fundamental learning, on the other hand some researchers stress the need to construct pedagogical proposals that take into account the school-related and regional specificities of each locality.

Since its development, the BNCC has received various criticisms, among which the following stand out: the lack of participation of teachers and civil society in its drafting; the limited flexibility for schools and teachers to adapt the curriculum to the local and individual needs of students; the excessive emphasis on cognitive content to the detriment of social-emotional skills; and the lack of clarity regarding the implementation and evaluation of the BNCC.

Carvalho and Silva (2017) suggest that the BNCC favours an economic perspective of education, in which human formation is recalibrated to meet the demands of the market and of productivity. For the authors, social-emotional competences such as responsibility, creativity, and self-control are seen not only as pedagogical objectives but also as strategies for preparing individuals for a model of society centred on competitiveness and performance.



In addition, Carvalho and Silva (2017) problematise the way in which the BNCC contributes to the dissemination of models of pedagogical intervention that emphasise large-scale assessment and the personalisation of educational pathways, expanding the influence of private agents and political networks in the formulation and implementation of educational policies. This movement, according to the authors, may reinforce inequalities and restrict the pedagogical autonomy of schools and teachers by imposing standardised models based on logics external to the educational field.

Along the same lines, Burgos and colleagues (2024) point to a mismatch between the document's intentions and the practical reality of schools in the country. The authors question the centralisation of competences and skills promoted by the BNCC, which could limit the pedagogical autonomy of teachers and schools and disregard the regional and local specificities that are essential for more contextualised and meaningful teaching.

Another point of criticism raised by the authors concerns the BNCC's difficulty in breaking with the traditional structures of the Brazilian school, since, despite proposing significant changes, the document faces limitations in effectively transforming pedagogical and organisational practices, which remain rooted in conventional models of teaching. Moreover, they highlight the lack of adequate support and investment in continuing teacher education, infrastructure, and resources, which compromises the implementation of the BNCC's proposals. Without such investment, the document's intentions may be confined to superficial changes, without achieving the expected impacts on the quality of education.

Another important aspect of the BNCC, in the context of this research, is the assignment, in its wording, of responsibility for environmental education (as well as for the other cross-cutting themes) to the education systems and networks and to the schools, in a manner similar to what happened with the amendment of the LDBEN by Law No. 14,945 of 31 July 2024 (Brasil, 2024b). Consider the following:

**Finally, it is incumbent upon the education systems and networks, as well as the schools, within their respective spheres of autonomy and competence, to incorporate into curricula and pedagogical proposals the approach to contemporary themes that affect human life on a local, regional, and global scale, preferably in a transversal and integrative manner. Among these themes, the following stand out:** the rights of the child and the adolescent (Law No. 8,069/199016), traffic education (Law No. 9,503/199717), **environmental education** (Law No. 9,795/1999, CNE/CP Opinion No. 14/2012, and CNE/CP Resolution No. 2/201218) [...]. In the BNCC, these themes are addressed within the skills of the curriculum components, with the education systems and schools being responsible, in accordance with their specificities, for treating them in a contextualised manner (Brasil, 2018, p. 19-20, emphasis added).

In analysing the document to understand how the presence of environmental education is configured in the BNCC, Barbosa and Oliveira (2020) explain that EE is dispersed across the various areas of knowledge of Primary Education, tied to the terms: environmental degradation, environmental conservation, environmental diversity, environmental balance, environmental quality, socio-environmental quality of life, socio-environmental awareness, socio-environmental sustainability, and responsible consumption. The authors thus question whether the BNCC offers sufficient conditions for the knowledge of the different areas to contribute to the development of a critical awareness of socio-environmental problems.

Along these lines, turning to the skills of the curriculum components relating to the approach to the environment and to themes related to EE, Silva and Loureiro (2020), in a study on the voices of teacher-researchers in the field of EE regarding the BNCC, from Early Childhood Education to Primary Education, argue that the document neither addresses EE critically nor deepens socio-environmental issues.

According to the authors, the positions of the interviewees corroborate the literature in indicating that, across the versions of the BNCC, there was a reduction, silencing, or complete absence of critical approaches in the environmental field, which translates into curricula and political-pedagogical projects disconnected from socio-environmental debates and into the reduction of EE to the dimension of themes. The interviewees understand the treatment of EE in the BNCC as superficial, technical, conservationist, and pragmatic, which would lead to an almost total silencing of the field's discussions and output in Brazil (Silva; Loureiro, 2020).

## Final remarks

This study sought to analyse the place that environmental education occupies in the Constitution and in the main Brazilian education laws, contributing to a reflection on the importance of the socio-environmental formation of children and young people in the school context.

According to the Constitution and the PNEA, environmental education is an essential and permanent component of national education, and it is the State's duty to guarantee this right to the population in an integrated way at all levels and in all educational modalities, including in the curricula of initial and continuing teacher education. The new PNE reinforces this orientation by establishing that all educational institutions should promote

environmental education on the basis of the PNEA and the national curriculum guidelines of the National Education Council (Brasil, 2026).

However, it was observed that, especially with regard to the BNCC and the amendment of Article 26, § 7, of the LDBEN by Law No. 14,945/2024, the explicit mandatory status of environmental education as a cross-cutting theme gave way to the possibility of projects and research defined by the education systems. In contrast, Strategy 5.3 of the PNE determines the implementation of the curriculum guidelines for environmental education in line with the cross-cutting themes of the BNCC, while Objective 8 organises specific targets and strategies for environmental education and the confronting of climate change (Brasil, 2026).

Thus, the 2026-2036 PNE represents a normative advance in articulating curriculum, the education of education professionals, school infrastructure, the management of water, energy, and waste, risk prevention, and community participation. Nevertheless, in the global context of socio-environmental crisis, the existence of national guidelines does not eliminate the risk of marginalising EE in curricular practices. It is necessary for its targets and strategies to take concrete form in the state, district, and municipal education plans, in the political-pedagogical projects, in teacher education, and in the action plans with allocation of resources, so that environmental education can effectively contribute to the formation of socially just and ecologically balanced societies.

## References

AVAMEC. *A BNCC e a Gestão Escolar*. 2022. Disponível em: <https://avamec.mec.gov.br/#/instituicao/seb/curso/2769/visualizar>. Acesso em: 14 mar. 2022.

BARBOSA, G. S.; OLIVEIRA, C. T. Educação Ambiental na Base Nacional Comum Curricular. *Revista Eletrônica do Mestrado em Educação Ambiental*, Rio Grande, v. 37, n. 1, p. 323-335, jan./abr. 2020.

BRASIL. *Constituição da República Federativa do Brasil de 1988*. Promulgada em 5 de outubro de 1988. Diário Oficial da União, Brasília, DF, 5 out. 1988. Disponível em: [https://www.planalto.gov.br/ccivil\\_03/constituicao/constituicao.htm](https://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm). Acesso em: 02 fev. 2023.

BRASIL. II Conferência das Nações Unidas sobre o Meio Ambiente e o Desenvolvimento (Eco-92). *Tratado de educação ambiental para sociedades sustentáveis e responsabilidade global*. 1992. Disponível em: <http://portal.mec.gov.br/secad/arquivos/pdf/educacaoambiental/tratado.pdf>. Acesso em: 08 jan. 2021.

BRASIL. *Lei nº 9.394, de 20 de dezembro de 1996*. Estabelece as diretrizes e bases da educação nacional. Disponível em: [https://www.planalto.gov.br/ccivil\\_03/leis/l9394.htm](https://www.planalto.gov.br/ccivil_03/leis/l9394.htm). Acesso em: 08 jan. 2021.

BRASIL. Ministério da Educação e do Desporto. Secretaria de Educação Fundamental. *Parâmetros Curriculares Nacionais: meio ambiente e saúde*. Brasília, DF: MEC/SEF, 1997. Disponível em: <https://portal.mec.gov.br/seb/arquivos/pdf/livro091.pdf>. Acesso em: 26 jun. 2026.

BRASIL. *Lei nº 9.795, de 27 de abril de 1999*. Dispõe sobre a educação ambiental, institui a Política Nacional de Educação Ambiental e dá outras providências. Disponível em: [https://www.planalto.gov.br/ccivil\\_03/leis/l9795.htm](https://www.planalto.gov.br/ccivil_03/leis/l9795.htm). Acesso em: 08 jan. 2021.

BRASIL. *Decreto nº 4.281, de 25 de junho de 2002*. Regulamenta a Lei nº 9.795, de 27 de abril de 1999, que institui a Política Nacional de Educação Ambiental, e dá outras providências. Disponível em: [https://www.planalto.gov.br/ccivil\\_03/decreto/2002/d4281.htm](https://www.planalto.gov.br/ccivil_03/decreto/2002/d4281.htm). Acesso em: 08 jan. 2021.

BRASIL. *Lei nº 12.305, de 2 de agosto de 2010*. Institui a Política Nacional de Resíduos Sólidos; altera a Lei nº 9.605, de 12 de fevereiro de 1998; e dá outras providências. Disponível em: [https://www.planalto.gov.br/ccivil\\_03/\\_ato2007-2010/2010/lei/l12305.htm](https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2010/lei/l12305.htm). Acesso em: 02 jan. 2025.

BRASIL. Conselho Nacional de Educação. *Resolução CNE/CP nº 2, de 15 de junho de 2012*. Estabelece as Diretrizes Curriculares Nacionais para a Educação Ambiental. Diário Oficial da União: seção 1, Brasília, DF, 18 jun. 2012. Disponível em: [https://portal.mec.gov.br/dmdocuments/rcp002\\_12.pdf](https://portal.mec.gov.br/dmdocuments/rcp002_12.pdf). Acesso em: 26 jun. 2026.

BRASIL. Ministério da Educação. *Base Nacional Comum Curricular*. Brasília: MEC, 2018.

BRASIL. *Lei nº 14.926, de 17 de julho de 2024a*. Altera a Lei nº 9.795, de 27 de abril de 1999, para assegurar atenção às mudanças do clima, à proteção da biodiversidade e aos riscos e vulnerabilidades a desastres socioambientais no âmbito da Política Nacional de Educação Ambiental. Disponível em: [https://www.planalto.gov.br/ccivil\\_03/\\_ato2023-2026/2024/lei/L14926.htm](https://www.planalto.gov.br/ccivil_03/_ato2023-2026/2024/lei/L14926.htm). Acesso em: 19 jan. 2025.

BRASIL. *Lei nº 14.945, de 31 de julho de 2024b*. Altera a Lei nº 9.394, de 20 de dezembro de 1996 (Lei de Diretrizes e Bases da Educação Nacional), a fim de definir diretrizes para o ensino médio, e as Leis nºs 14.818, de 16 de janeiro de 2024, 12.711, de 29 de agosto de 2012, 11.096, de 13 de janeiro de 2005, e 14.640, de 31 de julho de 2023. Disponível em: <https://www2.camara.leg.br/legin/fed/lei/2024/lei-14945-31-julho-2024-796017-publicacaooriginal-172512-pl.html>. Acesso em: 19 jan. 2025.

BRASIL. *Lei nº 15.388, de 14 de abril de 2026*. Aprova o Plano Nacional de Educação (PNE). Diário Oficial da União: seção 1, Brasília, DF, 15 abr. 2026. Disponível em: [https://www.planalto.gov.br/ccivil\\_03/\\_ato2023-2026/2026/lei/l15388.htm](https://www.planalto.gov.br/ccivil_03/_ato2023-2026/2026/lei/l15388.htm). Acesso em: 26 jun. 2026.

BURGOS, M. B.; BELLATO, C. C.; OLIVEIRA, G. N.; CAMASMIE, M. J. Base Nacional Comum Curricular: impacto sobre a cultura profissional e a forma escolar. *Revista Brasileira de Estudos Pedagógicos*, Brasília, v. 105, s/n, p. 1-21, 2024.

CARVALHO, L. M. A temática ambiental e o processo educativo: dimensões e abordagens. In: CINQUETTI, H. C. S.; LOGAREZZI, A. (Org.). *Consumo e Resíduo: Fundamentos para o trabalho educativo*. São Carlos: EdUFSCar, 2006. p. 19-41.

CARVALHO, L. M. *Pesquisa em Educação Ambiental no Brasil: um campo em construção?* 2015. 455 p. Tese (Livre Docência) - Instituto de Biociências, Universidade Estadual Paulista, Rio Claro, 2015.

CARVALHO, R. S.; SILVA, R. R. D. Currículos socioemocionais, habilidades do século XXI e o investimento econômico na educação: as novas políticas curriculares em exame. *Educar em Revista*, Curitiba, s/v, n. 63, p. 173-190, jan./mar. 2017.

CHOMSKY, N.; POLLIN, R. *Crise Climática e o Green New Deal Global: A economia política para salvar o planeta*. Tradução de B. C. Mattos. 1. ed. Rio de Janeiro: Roça Nova, 2020.

EXAME. *Desastres climáticos no Brasil crescem 2,5 vezes em quatro anos, aponta estudo*. 2024. Disponível em: <https://exame.com/esg/desastres-climaticos-no-brasilcrescem-25-vezes-em-quatro-anos-aponta-estudo>. Acesso em: 11 jan. 2025.

G1 RIO GRANDE DO SUL. *Um mês de enchentes no RS: veja cronologia do desastre que atingiu 471 cidades, matou mais de 170 pessoas e expulsou 600 mil de casa*. 2024. Disponível em: <https://g1.globo.com/rs/rio-grande-do-sul/noticia/2024/05/29/um-mes-de-enchentes-nors-veja-cronologia-do-desastre.ghtml>. Acesso em: 11 jan. 2025.

LAYRARGUES, P. P.; LIMA, G. F. C. As macro tendências político-pedagógicas da Educação Ambiental brasileira. *Ambiente & Sociedade*, São Paulo, v. 17, n. 1, p. 23-40, jan./mar. 2014.

LAYRARGUES, P. P.; PUGGIAN, C.; MENEZES, A. K. Educação, Movimentos Sociais e Mulheres: Redes de Articulação e Resistência. *Pesquisa em Educação Ambiental*, Rio Claro, v. 15, n. 1, p. 51-62, 2020.

LAYRARGUES, P. P.; SATO, M. *Se o mundo vai acabar, por que deveríamos reagir? - A agenda da educação ambiental no limiar do colapso ambiental*. Brasília: Editora Universidade de Brasília, 2024.

LIMA, G. F. C. *Formação e dinâmica do campo da Educação Ambiental no Brasil: Emergência, identidades, desafios*. 2005. 207 p. Tese (Doutorado em Ciências Sociais) - Instituto de Filosofia e Ciências Humanas, Universidade Estadual de Campinas, Campinas, 2005.

LIMA, G. F. C. Educação ambiental crítica: do socioambientalismo às sociedades sustentáveis. *Educação e Pesquisa*, São Paulo, v. 35, n. 1, p. 145-163, jan./abr. 2009.

LOUREIRO, C. F. B. Educação ambiental crítica e lutas antissistêmicas. In: MILANEZ, F.; TRUJILLO, M. L. N.; ROCA-SERVAT, D. (Org.). *Senti-pensarnos Tierra: educación ambiental y Ecología política en clave latinoamericana y del Caribe*. Ciudad Autónoma de Buenos Aires: CLACSO, 2022. p. 46-52.

SAUVÉ, L. Uma cartografia das correntes em educação ambiental. In: SATO, M.; CARVALHO, I. (Org.). *Educação Ambiental: pesquisa e desafios*. Porto Alegre: Artmed, 2005. p. 17-44.

SILVA, S. N.; LOUREIRO, C. F. B. As Vozes de Professores-Pesquisadores do Campo da Educação Ambiental sobre a Base Nacional Comum Curricular (BNCC): Educação Infantil ao Ensino Fundamental. *Ciência & Educação*, Bauru, v. 26, n. 1, p. 1-15, 2020.

SORRENTINO, M. *Educação ambiental e universidade: um estudo de caso*. 1995. Tese (Doutorado em Educação) - Faculdade de Educação, Universidade de São Paulo, São Paulo, 1995.

TREIN, E. S. A Educação Ambiental Crítica: crítica de que? *Revista Contemporânea de Educação*, Rio de Janeiro, v. 7, n. 14, p. 304-318, ago./dez. 2012.

WILLIAMS, R. *Recursos da esperança: cultura, democracia, socialismo*. Tradução de N. Fonseca e J. A. Peschanski. 1. ed. São Paulo: Editora Unesp, 2015.

WORLD HEALTH ORGANIZATION. *Public health and environment*. 2024. Disponível em: <https://www.who.int/data/gho/data/themes/public-health-and-environment>. Acesso em: 03 jan. 2024.