

ECOLOGICAL LITERACY: AN EFFECTIVE INSTRUMENT FOR SUSTAINABILITY AND ENVIRONMENTAL PROTECTION

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ABSTRACT

Our objective is to study ecoliteracy, a term created by physicist Fritjof Capra, as a means of transforming and enabling human beings to build a sustainable society, based on systemic knowledge and sustainable development, as well as its repercussions to fulfill the article 225 of the 1988 Brazilian Constitution, which states that all have the right to an ecologically balanced environment, besides being responsible for this environmental defense and protection for present and future generations. As such, the overall objective is to identify education based on Ecoliteracy and its contribution to achieving a sustainable society and environmentally conscious human beings capable of defending and protecting the environment. As specific objectives, we conceptualize ecoliteracy, sustainability and environment. In this research we try to answer if the current education system is prepared for training individuals for environmental ethics and respect. It is justified by its academic and social relevance, considering reflections and contributions of ecological

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literacy, highlighting the need of empowering human beings with new skills based on systemic knowledge and for sustainable human development. We applied the inductive logical base from bibliographical and documentary research as methodology.

Keywords: ecoliteracy; education; environment.

*ALFABETIZAÇÃO ECOLÓGICA: UM INSTRUMENTO PARA A
EFICÁCIA DA SUSTENTABILIDADE E PROTEÇÃO DO MEIO
AMBIENTE*

RESUMO

O objetivo deste trabalho é estudar a ecoalfabetização, termo criado pelo físico Fritjof Capra, como meio transformador e capacitador do ser humano para a construção de uma sociedade sustentável, baseada no conhecimento sistêmico e no desenvolvimento sustentável, bem como seu consequente desdobramento para a realização dos ditames do art. 225 da Constituição da República Federativa do Brasil de 1988, que diz que toda pessoa tem direito a um meio ambiente ecologicamente equilibrado, além de ser responsável pela defesa e proteção desse meio ambiente para as gerações presentes e futuras. Portanto, o objetivo geral é identificar a formação pautada na Ecoalfabetização e sua contribuição para a conquista de uma sociedade sustentável e de seres humanos ambientalmente conscientes e capazes de defender e proteger o meio ambiente. Como objetivos específicos, busca conceituar a Ecoalfabetização, sustentabilidade e meio ambiente. A pesquisa busca confirmar se o sistema educacional atual está preparado para formar o indivíduo na ética e no respeito ao meio ambiente. Justifica-se por sua relevância acadêmica e social, considerando as reflexões e contribuições por meio da alfabetização ecológica, evidenciando a necessidade de capacitar o ser humano para novas competências baseadas no conhecimento sistêmico e para o desenvolvimento humano sustentável. Como metodologia, foi utilizada a base da lógica indutiva por meio de pesquisa bibliográfica e documental.

Palavras-chave: ecoalfabetização; educação; meio ambiente.

INTRODUCTION

In recent decades, there has been a deficiency in the current education system in training individuals, especially regarding ethics, morals and the environment. The scenario is of one great crisis of perception and in it other crises such as environmental, economic, ethical and moral, as Fritjof Capra points out.

The awakening of environmental awareness stems from the knowledge of how nature behaves and how man depends and belongs to nature. For Capra (2006, p. 158, our translation), “[...] the most coherent way of treatment and approximation in relation to nature is not through domination and control, but through respect, cooperation and dialogue.”

In this respect, a paradigm shift in the human posture regarding the environment is necessary, rescuing values that man is an element of nature, not its ruler. Deep ecology therefore comes in favor of avoiding anthropocentric thinking⁴ and directing human efforts to understanding they cannot solve environmental issues without recognizing the “[...] intrinsic value of all living beings” (CAPRA, 2006, p. 126, our translation).

The format in which institutions convey knowledge, derived from an outdated educational model, no longer provide the necessary answers to current problems. Thus, a new look at the educational system is necessary; we present new directions for education in this study, based on Ecoliteracy – a term created by physicist Fritjof Capra, as well as the Ecoliteracy Center –, which aims to spread sustainable actions and values, transforming the planet into a socially just, morally ethical and environmentally sustainable place for present and future generations.

Divided into three parts, the first discusses the concepts of environment and its subdivisions contemplated in the 1988 Constitution of the Federative Republic of Brazil. The second presents the concept of sustainability and its dimensions, and the third focus on the importance of education in the realization of environmental protection, the inability of current educational institutions in achieving this goal and the ideals of Ecoliteracy. The methodology uses bibliographic review techniques and records, based on inductive logic.

⁴ anthropocentrism comes from a hybrid word of Greek-Latin composition, from Greek: *anthropos*, man; from Latin: *centrum*, *centricum*, center. In short, such a conception considers the human being as the center of the Universe. The human species is regarded as the maximum and absolute reference of values, around which other beings gravitate. From an anthropocentric point of view, there would be no environmental protection if there were no direct and immediate benefits to the human species, and all the benefits of environmental protection should converge on human beings, the center of the entire environment, as if nature and society belonged to different planes, opposite one other (MILARÉ, 2014, p.106).

1 ENVIRONMENT

Each day the theme “environment” gains more space on the international agenda and in political debates. It is evident that this stems from the fact that also every day environmental problems are greater in quantity and potentiality. In fact, global warming, the hole in the ozone layer, the scarcity of drinking water, the destruction of forests are some of the environmental problems endangering the quality of life of living beings. However, most often, the term environment has been used superficially and, in some cases, incompletely. For some, it means nature itself, biologically divided into kingdoms such as the vegetable, the animal and the mineral, for example. Others give a wider range, including artificial elements to this “environment,” such as man-made cities and still immaterial elements, such as the habits and culture of a given people. Krzysczak (2016, p. 4, our translation) states that this “heterogeneity of perception is the result of how we relate to it.” According to the author,

Doctrinally, there is no unanimity among experts on the concept of environment. In a broad sense, it means place, space or location of living beings and things. Strictly speaking, it represents the combination of all things and factors external to the individual or population of individuals, consisting of biotic and abiotic beings and their relations and interrelations (KRZYSCZAK, 2016, p. 4, our translation).

Migliari Junior (2001, p. 40, our translation) defines it as the “integration and interaction of the set of natural, artificial, cultural and labor elements that provide a balanced development in all its forms, without exceptions.” But it is the physicist Capra who brings a systemic vision, deducing the idea of the connection between everything and everyone, by stating that,

It is a systemic view that finds refuge in the fields of modern science, such as quantum physics, according to which the universe, like everything it encompasses, consists of a network of relations in which all parties are interconnected (CAPRA, 1988, p. 51, our translation).

For this study, the legal concept attributed by the National Environment Policy, established by Law 6.938/1981, in its art. 3, that the environment is “the set of conditions, laws, influences and interactions of a physical, chemical and biological order, which allows, harbors and governs life in all its forms.” The CRFB included four environmental spheres within this concept, expanding the scope of effectiveness of environmental

laws: natural, artificial, work and cultural environment. Although outside the scope of this article, it is important to underline these areas here, so we may understand how integral the effect of ecological literacy is for the effectiveness of sustainability and for the protection of all these environments and, finally, the maintenance of life, both for current and future generations.

The natural (or physical) environment is that described by the National Environment Policy Law (mentioned above) and the 1988 Constitution of the Federative Republic of Brazil, in its art. 225, composed of natural resources such as water, soil, atmospheric air, fauna and flora.

Art. 225. All have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have 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 environment education at all school levels and public awareness of the need to preserve the environment (BRASIL, 1988, our translation).

The artificial environment is one formed by urban spaces, or cities. Addressing this issue, the 1988 Brazilian Constitution describes in Art. 182, which deals with national urban policy:

Art. 182. The urban development policy carried out by the municipal government, according to general guidelines set forth in the law, aims at ordaining the full development of the city's social functions and ensuring the well-being of its inhabitants (BRASIL, 1988, our translation).

The work environment is one in which human beings perform work activities, and it must present health conditions and absence of agents that put the workers' physical and mental health at risk. In the 1988 Constitution of the Federative Republic of Brazil, it is provided for in art. 225, already described, as well as in art. 200, VIII:

Art. 200. It is incumbent upon the unified health system, in addition to other duties, as set forth by the law:

[...]

VIII – to cooperate in the protection of the environment, including that of the workplace (BRASIL, 1988, our translation).

It is possible to note that cultural heritage, including cultural, tourist, archaeological, landscape and natural relations is what composes the

cultural environment, according to what is described in art. 215 of the 1988 Brazilian Constitution:

Art. 215. The *State shall ensure* to all the *full exercise* of the *cultural rights* and *access* to the *sources* of *national culture* and *shall support* and *foster* the *appreciation* and *diffusion* of cultural expressions (BRASIL, 1988, our translation).

However, although the Brazilian legal system embraced the concept of environment, we observe that, from the first World Conference on the Environment in Stockholm (1972), to the last held in Rio de Janeiro (2012), many are the challenges for maintaining a balanced and healthy environment on the planet. As indicated by Souza and García (2016, p. 14, our translation), “objectives are reviewed, agendas are recreated, but the perception of progress is slow. In fact, there is an environmental crisis.” Many interests involved, in which development and economic progress at any cost interrupt any attempt at environmental progress and development. The Brundtland Report, a document drawn up in 1987 establishing “long-term environmental strategies to achieve [...] cooperation between developed countries and countries at different stages of development” (SOUZA; GARCIA, 2016, p. 14, our translation), addresses the:

State responsibility to maintain ecosystems and ecological processes, as well as establish adequate environmental protection standards; The effectiveness of strategic environmental assessments and the provision of information to the population on the possible damage to be suffered.

In this same document, the concept of sustainable development appears as one that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (CMED, 1991, p. 46).

The Brundtland Report represents a milestone in global society’s discussions and concerns about the environment and development. It consisted of a ‘global change agenda,’ as there was an urgent call for establishing long-term environmental strategies to achieve sustainable development, as well as ways that concern for the environment could result in increased cooperation between developed countries and countries at different stages of development.

2 SUSTAINABILITY

The global definition for “sustainability” is commonly confused with the definition used for the term “sustainable development.”

According to Boff (2012, p. 34, our translation), sustainability is:

The set of processes and actions designed to maintain the vitality and integrity of Mother Earth, the preservation of its ecosystems with all the physical, chemical and ecological elements that enable the existence and reproduction of life, the fulfillment of the needs of present and future generations and the continuity, expansion and realization of the potentialities of human civilization.

The right to sustainability is the most appropriate way of thinking to solve global problems. It is considered an emerging set of transformation of environmental legislation, facing social and economic problems in the search for a better society that manages to remain in the environment with quality of life. Unfortunately, society has not awakened its potential. It is even more concerned with maximizing profit than with issues of ethical distribution, preservation and recovery of the environment. Thus, we must assume an attitude not only of isolated local or national actions, but of an intense transnational environmental mobilization so we may build a solidary and global commitment with the environment to preventively improve the continuous relation between human beings and nature.

Recently, it is insufficient to develop sophisticated legal theories in relation to sectoral issues and institutes that protect the complex phenomenon of human coexistence. With the transnational scenario, the emergence and consolidation of a new paradigm of law is necessary, which must be more useful and efficient to meet the demands of humanity in the current context. It is in this scenario that the Theory of Sustainability emerges, to be applied and recognized in the current highly complex and transnational legal system.

However, Ferrer warns (2008, our translation):

Sustainability is more related to the Millennium Goals, which are humanity's guide to action. The goal of the environment is to ensure conditions that enable human life on the planet. On the other hand, the other two aspects of sustainability – the social aspects, preoccupied with inclusion, with avoiding marginality, with incorporating new models of governance, etc.; and the economic aspects, related to growth and distribution of wealth. It is about dignifying life. Sustainability tells us that guaranteeing subsistence is not enough; the human condition demands the guarantee of decent living conditions.

Freitas (2016, p. 43, our translation) defines sustainability as:

[...] the constitutional principle that determines, with direct and immediate effectiveness, the State and society's responsibility for the solidary realization of material and immaterial development, socially inclusive, durable and equitable,

environmentally clean, innovative, ethical and efficient, to ensure, in the present and in the future, the right to well-being [...].

He continues, indicating that it has a multidimensional character, on which the processes and actions that are aimed at the preservation of the human race on the planet should be focused (FREITAS, 2016).

Three traditional dimensions of sustainability stand out: social, environmental and economic. In the social dimension, we seek to achieve a more homogeneous and better governed society, with access to health and education, combating discrimination, social exclusion, misery and the survival of the few. It is in this dimension that “fundamental social rights are housed” (FREITAS, 2016, p. 62, our translation). The environmental dimension is directly related to the environment. Knowing that the degradation of the environment can ultimately derail man’s life, it is impossible to perpetuate the species without a dignified environment. Included is the guarantee of protection of the planetary system, in order to maintain the conditions that make life on Earth possible. For this, it is necessary to develop global standards, of an imperative character, for this dimension to be effective. The economic dimension indicates the production base necessarily depends on the natural system, that is, “what nature generates and, especially, energy” (SOUZA, 2014, our translation).

It is noteworthy that these dimensions are not separated or disconnected. A balance between dimensions is required. These mix, sometimes merge, sometimes intertwine, in a dialectic of sustainability, focusing on what Souza and García (2016, p. 9, our translation) highlight: “Earth can continue without humanity, but humanity cannot continue without the land and its resources.”

For these reasons, there is no doubt, then, in affirming that sustainability translates into the harmony with which human beings relate and interconnect with the environment, avoiding its extermination by its collapse. And it is with this harmony that the development of the human race is sought. Or rather, it is via sustainable development that the perpetuation of species on the planet is sought; as Souza and Garcia (2016, p. 10, our translation) state “The difference between sustainability and sustainable development is that the latter corresponds to the environment, while the former is the end to be achieved.” And as there is no development without education, nothing is more rational than understanding that, to achieve sustainable development, we must literate society ecologically.

Thus, there is no doubt that Sustainability is directly related to the

objectives of sustainable development. And humanity itself will lead this process, in which, to ensure an ecologically healthy environment, enabling human life on earth, one must include social and economic aspects. The social relates to including the excluded, avoiding marginalization. The economic, with population growth and wealth distribution.

3 ECOLOGICAL LITERACY

After the first World Conference on the Environment in 1972 in Stockholm, much has been debated and been done with the purpose of reversing the environmental problems that human beings have created for themselves. One of the actions developed and implemented was the creation of the United Nations Environment Program (UNEP), whose main goal is the search for sustainable development via policies and actions aimed at environmental management, mission in which dissemination and knowledge plays a fundamental role, as seen in principle 19 of this Conference:

An effort for education on environmental issues is essential, aimed at both young generations and adults and paying due attention to the less privileged population, to provide the basis for a well-informed public opinion and for a conduct of individuals, companies and collectivities inspired by their responsibility for protecting and improving the environment in all its human dimension (ONU, 2020, our translation).

After, many other international congresses have taken place, in which the theme ‘environmental education’ appear with such force, given its need, so that “the balanced [and] essential environment for a healthy quality of life [is] defended and preserved [...] by the community,” according to the 1988 Constitution of the Federative Republic of Brazil. Article 225 of the Magna Carta, highlights everyone’s responsibility in protecting the environment and not just the burden of public power. And environmental education is the most effective way of making this collective progress according to harmonious opinions of sustainable development, in search of sustainability.

Souza and Pasold’s words (2017, p 141) on “teaching” and “education” stand out – to analyze and discuss the manner of transmitting knowledge and personal and collective values, so necessary for the community to act in the defense and preservation of the environment. According to the authors,

Teaching is the transmission of data intellectually transformed into articulated knowledge, with the specific objective of facing personal and professional demands,

in a permanent “contest of tests” of life.

Education is teaching added to Training and ethically committed to a system of personal and collective values, in which they commit themselves to humanity, solidarity, sustainability and, therefore, the Common Good in its complete and contemporary sense, pontificate. The first difference between the two categories is that education implies an irreversible ethical commitment to the whole of society, and not with fractions privileged by any differentiating reference order, as with training. The second difference is in the unwavering commitment of education to the Common Good, understood here as an ordering of beliefs, values and information (SOUZA; PASOLD, 2017, p. 141, our translation).

However, what is observed in the overwhelming majority of educational institutions, as its name implies, is the teaching of subjects “in a compartmentalized manner, preventing scholars from having a systemic view of the subjects presented to them” (SOUZA; STOHRER, 2017, p. 60, our translation), whose focus is on the technique of memorizing formulas and tricks, on test score, on passing in entrance exams, contests and order exams – not on developing autonomy as a student, at the beginning of their critical sense. “Our number-obsessed culture gave us the idea that what we can measure is more important than what we cannot measure” (MEADOWS, 2006, p. 233, our translation), and what prevails is the commodification of education. As well as “The dominant metaphors are basic products and the market.” We see knowledge as something we must understand, possess and control (MORGOLIN, 2006, p. 109, our translation).

And as Souza and Stohrer state (2017, p. 60, our translation),

No one criticizes the need for technical and professional training that allows the academic to act accurately [...]. However, what we observe in practice is a true orientation of the content for exams, abandoning the development of skills such as the interpretation of texts and the connection of content [...]. The dilemma [...] faced by teachers [is to ask] for the result. However, this result comes from exams that, in fact, do not measure the knowledge acquired by the candidates. On the contrary, they end up reducing to numbers all the effort made over the years.

Holt (2006, p. 89, our translation) states that

Education and qualities such as creativity, vitality, motivation, enthusiasm and compassion are cultural goods that cannot be weighed or measured [...]. Quantified performance (numerically, if possible) classifies schools by category and sets progress goals [...]. Such is a pragmatic view of responsibility, according to the law of the jungle. Performance and condescension are the key concepts and have a profound effect on teachers’ professional lives. [...] As professionals, they want to inspire new ideas in students and make the course meet their interests.

Educational institutions lack what Souza and Pasold (2017, p. 141, our translation) punctuate and that education should pontificate:

The balanced sum of education and training. The latter is characterized by awakening and developing awareness and the exercise of citizenship, in which the commitment to the defense/preservation/recovery of the environment will emerge, in this 21st century, as a fundamental component, which extends to all school and extracurricular curricula.

“Education and citizenship are inseparable. The stimulus brought by education [for sustainability] allows the individual to claim social and ethical justice in the relations between society and nature” (SOUZA; SELL, 2015, p. 113, our translation), since education for a sustainable life stimulates intellectual understanding of ecology and the creation of emotional bonds with nature.

Capra (2006, p. 48, our translation) states that “we can create sustainable societies by following the model of nature’s ecosystems. [...] We have to know the basic principles of ecology: the language of nature, [...] the theory of living systems.” He adds that

The systemic understanding of life that is now at the forefront of science is based on the understanding of three essential phenomena: the basic pattern of organizing life is that of the network or fabric; matter runs through the fabric of life; All ecological cycles are sustained by the constant flow of energy from the sun: [...] the fabric of life, the cycles of nature and the flow of energy (CAPRA, 2006, p. 14, our translation).

For him, “As all living systems have in common sets of properties and principles of organization, systemic thinking can be applied to integrate academic disciplines that were previously fragmented” (CAPRA, 2006, p. 51, our translation). Similarly, “understanding difficulties as systemic can suggest ways to face them” (EVANS, 2006, p. 287, our translation). But, for that, it is important to change the rigid and compartmentalized system of schools and other educational institutions “from objective knowledge to contextual knowledge, [...] from analytical thinking to contextual thinking. [...] From quantity to quality” (CAPRA, 2006, p. 50, our translation).

The change in schools must be systemic. And Evans (2006, p. 288, our translation) states that “Systemic change in schools means changing the environment, structure, communication standards, and values and priorities of education. It means reconnecting the missing links in our educational system.” As Holt states (2006, p. 92, our translation),

The school must be inserted in its context: it must understand its community, in social and political terms, and work with it. [It] needs to critically examine the issue of scope: less is definitely more. Much can be achieved by associating related disciplines, integrating learning around common themes.

There are countless ideas and new models of teaching format, or rather, of education focused on Ecoliteracy, in which human being is not the center, but a participant in the web of life called Planet Earth. In his work *Ecological alphabetization*, Capra discuss some of them, pointing out the significant social changes presented in the places where schools adopted them, such as slow food. Indigenous pedagogy, environmental and artistic education via the Rio das Palavras project, STRAW Project, among others.

The social responsibility of ethical conduct invokes the need for training that rescues the values of life in society. These values, in turn, can be further developed at the school level, by Ecoliteracy, a concept invented and developed by Fritjof Capra with the Ecoliteracy Center, a non-profit entity founded by the author in 1995 and focused on education for a sustainable living (CAPRA, 2006).

The work resulting from the project led by Capra presents case reports, highlighting the profound social changes in places where schools were opened to the concept of ecoliteracy.

An initiative that deserves to be highlighted is the proposal of the values of the slow food movement for education, creating a slow food movement. Holt's analogy (2006, p. 87-94) seeks to internalize in teaching the guiding principles of the movement that preaches the consumption of homemade food, as opposed to the slow food advocated by many.

Slow school seeks to identify the possibility of personal fulfillment with the acquisition of knowledge provided in the school environment. It allows a better student management regarding the projects to which it proposes to adhere and a true integration of concepts of philosophy, tradition, community and moral choices (Holt, 2006, p. 91).

In this sense, the Slow school movement allows a genuine integration between theory and practice, leading students to apply theoretical concepts in solving problems in their communities, in a true connection with the different knowledges acquired throughout the course.

In academia, the contribution of slow school values could be precisely the greater integration of environmental content with that of other subjects, so that students seek to solve real legal situations.

The rigid curriculum makes the disciplines work in isolation, sharing

the knowledge acquired by the scholar, who alone may be unable to assess the breadth of the concepts studied and their interrelation.

Environmental education focused on sustainability lacks the work of internalizing the concepts of respect for the planet and society and can be implemented in higher education as something more than compliance with a legal determination. The idea of Slow school aims to remove the “curricular straitjacket” (HOLT, 2006, p.88, our translation) and allow performance evaluation in an integrated manner. Perhaps full integration is too bold for the established structure of law courses. However, there is nothing to prevent teachers from the same academic semester from developing interdisciplinary projects to present to the future jurist the true scope of the contents taught in the classroom.

All models presented by Capra (2006, p. 152, our translation) in this work are aimed at the school and children, because if they “understand and love the place where they live, when they grow up they will become citizens committed to preserving the place.” They – the children – “care about crime, global warming, hunger, wars, a totally insecure world that they feel is getting worse and that compromise their future,” not to mention that “they feel good when they can actually help someone, when they know they are useful to other people” (BARLOW; MARCELINO; STONE, 2006, p. 190, our translation).

As Callenbach (2006, p. 75, our translation) indicates,

[...] We realize that children are born with certain values intact – that is, the feeling of fear or reverence and an affinity with nature. [...] E.O. Wilson calls it “biophilia.” We all have this ability, but it seems to be more pronounced in children. [...] And one of our beliefs is, we think that when properly fed, biophilia can become literacy and result in a more sustainable society.

We need to reevaluate the whole process of teaching human beings, focusing on the principles of ecology, “A new way of seeing the world and thinking is needed, regarding relationships, connections and contexts, which goes against the principles of traditional Western science and education.” We must “recognize the crucial role of emotions in the learning process, activities that inform the mind and involve the heart have proven to be a powerful and effective combination” (MICHAEL, 2006, p. 148, our translation).

Finally, as Migliari Junior (2001. p. 40, our translation) states, “there will be no healthy environment until the quality of integration and interaction of this group is raised to the highest degree of excellence.” And so,

“we must all ask ourselves about the purpose of the places where we send our children every day to be educated” (ABLEMAN, 2006, p. 213, our translation).

Few are the organizations that systematically invest in training programs and organizational changes, aiming to reduce the socio-environmental problems arising from their activities. The tendency is that this reality will gradually change, as the need to develop a strategic vision is realized, considering the demands of the international market, which often ends up becoming true instruments of trade barrier.

From mass exploration and its effects on the environment, humanity came to understand the true importance of biodiversity, understanding that without its preservation, there will be no guarantee of survival for most species. It was difficult to realize that natural resources are exhaustible and that all attitudes that directly or indirectly affect the environment also harm human beings. The delay in the perception and change in peoples' behavior is regrettable (SOUZA, 2016).

Environmental protection is a matter of survival, and the problems caused depend on the country of origin. They can reach a specific locality or the entire population. Air and water pollution, greenhouse gas and many other types of damage to the environment end up harming everyone's right to a healthy and balanced environment.

FINAL REMARKS

This study aimed to investigate whether the current educational system is prepared for training the individual in ethics and respect for the environment. The educational field requires urgent changes, with a view to prospective, systemic and transformative teaching, committed to the rescue of values of respect for nature to create a true environmental citizenship. Every human being is a part of the web of life and needs to see themselves as part of the whole, without placing themselves above nature or the other.

It is a time of environmental crisis in several segments, marked by problems related to pollution and degradation of ecosystems, such as the depletion of resources, the uncontrollable growth of the world population, unsustainable imbalances and destructive conflicts, with the loss of biological and cultural diversity. Therefore, this harmful advance to the environment must be stopped. We know that this problem will not be solved with

just one measure. It is somewhat complex. Even so, one of the solutions that must be implemented is to enforce what determines the constitutional order. The duty of preserving the community is expressed in art. 225 of the 1988 Constitution of the Federative Republic of Brazil.

It is necessary and urgent to trigger an effective Environmental Education throughout the planet, being the only effective way to fully and consistently spread Ecological Awareness in attitudes and behaviors for a healthy and balanced environment. The Brazilian Constitution determines that it is everyone's duty to defend and protect the environment and it is incumbent upon the Government to promote environmental education at all school levels and to raise awareness among the population. What we observe, however, is an inefficient promotion and awareness, given the increasing degradation of the environment.

There is, at some point, a failure in individuals' educational training. And we understand, after the analysis of this research, that the education model contributes to the inefficiency of environmental protection. The idea that everything is connected and that the Planet must be kept in harmony to continue sheltering our existence in it, has not yet been internalized by the population. It is essential that individuals' educational training focus on the concepts of sustainability. Human beings must learn to be harmonious in their relationships. The need to rescue the values of communion with the environment and nature is urgent.

Once the need for change is identified, Fritjof Capra presents the Eco-literacy model, whose objective is to rescue cultural, social, ethical and environmental values, forming conscious citizens, by a holistic, systemic, non-fragmented – or stuck – to quantitative standards type of education. The challenge is to create sustainable communities, designed so their ways of life, business, economies, technologies and physical structures do not interfere with nature's inherent capacity to sustain life.

The concern with environmental protection must be present in all areas of society, because when talking about environmental protection, the issue acquires a universal dimension. This is because preserving the planet, although in this case from a purely anthropocentric view, is a premise for the human species' continued survival on Earth. It is no longer possible to conceive beings with higher education without the mental capacity to identify the central problems of contemporary society.

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