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ENVIRONMENTAL EDUCATION: TRAINING TOOL FOR STIMULATING CONSCIOUS SINCE INITIAL SCHOOL GRADES.

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Abstract. Environmental education has the important role of alerting people to the consequences of their actions on the environment, as well as the impacts caused by them. In this perspective, teachers have the role of stimulating students to think in a contextualized way about how they relate to the environment in where they live and, thus, to modify small habits of everyday life, to reduce excessive water consumption, to recycle, reuse, avoid waste and consumerism This article aims to discuss the importance of teaching environmental education as a transversal theme from the initial grades of elementary education to reinforce the importance of working it effectively in schools. This study has as a future proposal the environmental education to be worked at schools, as a discipline from the initial grades will facilitate the formation of conscious citizens about their role with the environment, improving this relationship.

Keywords: Environmental Education; Education; Environment.

EDUCAÇÃO AMBIENTAL: INSTRUMENTO PARA FORMAÇÃO DO CIDADÃO CONSCIENTE A PARTIR DAS SÉRIES INICIAS

Resumo. A educação ambiental tem o importante papel de alertar as pessoas sobre as consequências de suas ações junto ao meio ambiente, bem como dos impactos causados por elas. Nessa perspectiva, o professor tem a função de estimular os estudantes a pensar de forma contextualizada no modo como se relacionam com o meio onde vivem e, assim, modificar pequenos hábitos do dia-a-dia, para reduzir o consumo excessivo de água, reciclar, reutilizar, evitar desperdícios e o consumismo. Este artigo tem como objetivo discutir a importância do ensino da educação ambiental como temática transversal a partir das séries iniciais do ensino fundamental para reforçar a importância de trabalhá-la de forma

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efetiva nas escolas. Este estudo tem como proposta usar a educação ambiental nas escolas como disciplina a partir das séries iniciais, promovendo a formação de cidadãos conscientes sobre seu papel com o meio ambiente, melhorando esta relação.

Palavras chave: Educação Ambiental; Educação; Meio Ambiente.

EDUCACIÓN AMBIENTAL: INSTRUMENTO PARA FORMACION DEL CIUDADANO CONSCIENTE A PARTIR DE LAS SERIES INICIALES

Resumen. La educación ambiental tiene el importante papel de alertar a la comunidad sobre las consecuencias de sus acciones en el ambiente, así como los impactos causados por ellos. En esta perspectiva, los maestros tienen la misión de estimular sus estudiantes a pensar de forma contextualizada sobre su relación con el medio ambiente en el cual cada uno vive, y de esta manera, modificar pequeños hábitos diarios, reducir el consumo excesivo de agua, reciclar, reusar, evitar desperdicios y consumismo. Este artículo pretende discutir el importante papel de la educación ambiental como un tema transversal desde los grados iniciales de educación elementar para reforzar la importancia de trabajar de manera efectiva en las escuelas. Este estudio pretende proponer en el futuro, que la educación ambiental sea trabajada en las escuelas como una disciplina desde los grados iniciales, para facilitar la formación de ciudadanos conscientes acerca de su papel con el medio ambiente, mejorando esta relación.

Palabras clave: Educación Ambiental; Educación; Medio Ambiente.

INTRODUCTION

Environmental Education (EE) is an important area of knowledge for the formation of citizens, because it stimulates the consciousness for the need to adopt a responsible attitude regarding their daily habits for the maintenance and conservation of the environment. EE has an educational approach based on an expanded perspective regarding the concept of education, in which the contextualized participation of the relations between human beings and the environment is stimulated, as well as the problems related to the inequalities of these relationships (SILVA, 2012).

The EE is not only materialized by theoretical knowledge, but by the accomplishment of actions, which aim at the change responsible for changes. These actions are supported through ethics, social justice and honesty, values to be stimulated since childhood (MACIEL, 2012). The environmental themes are increasingly present in the daily life of society. In this sense, EE becomes fundamental in all stages of school education processes, especially in the first years of teaching, when aspects related to critical-reflexive discernment about social-environmental issues should begin to be stimulated. Medeiros et al. (2011) understand that it

is easier to start discussions about environmental issues with younger people than with adult groups.

EE should be worked on at school from the early grades because in this way, it will be possible to obtain changes in the behavior related with the environment for future generations. About this matter, Effting (2007) discusses the importance of environmental education:

> Environmental Education, as an essential component in the process of education and lifelong learning, with an approach oriented to resolve problems, contributes to the active involvement of the public, makes the education system more relevant and more realistic and establishes a greater interdependence between these systems and the natural and social environment, with the objective of increasing the well-being of human communities (EFFTING, 2007, p.24).

According to Rodrigues (2001), EA must to manage innovative analyzes at any time or place, and can be developed in formal or informal space. This should promote the awareness of several populations, providing means for democratic changes, which instigate the most disadvantaged populations. For such purpose, according to Maciel (2012), EE should establish the best relations between humans and the environment:

> Environmental education should establish ethical principles which guide man's relationships with nature, between the men, and provide the construction of a more just and humane nation, because his role is to generate ideas, ethical value creator, researcher of knowledge and creator of ideals (MACIEL, 2012, p. 43-44).

Thus, teachers have an important role to accomplish, stimulating their students to modify small habits of everyday life, such as reducing excessive water use, recycling, reusing, avoiding waste and consumerism. All these actions can help in order to recover planet in where we live and that needs to be taken care of, as well as to understand broadly the interactions of the relations between human beings and the environment. The problematic of this article is the next question: does the absence of environmental education teaching as a discipline from the initial series delay the formation of a social actor focused on environmental preservation? In this sense, the objective of this article is to analyze the

importance of Environmental Education teaching, engaged as a discipline from elementary school, in order to encourage teachers to work with this theme in schools.

Brief History of Environmental Education

In September of 1962, the publication of the book "Silent Spring" (1969), written by the journalist Rachel Carson, caused great impact on the environmental conscience in several countries. This author reports in this book the abusive use of pesticides and their effects on the environment, which has led to the mobilization of Non-Governmental Organizations (NGOs) to combat this situation and, consequently, to pressure the authorities in different countries. This book is considered historically the first world warning against the harmful effects of pesticide use in agriculture. It was from this publication, which the environmental movements in several countries were stimulated.

Since the 1970s, concerns about environmental problems have been more intense than in previous years. In that decade, many events emerged that addressed environmental issues around the world, such as in 1972, the Stockholm Conference in Sweden, developed by the United Nations (UN), which was the first human environment event discussed in a global perspective (GRZEBIELUKA; KUBIAK; SCHILLER, 2014).

In April 1981, a Law was promulgated mentioning Environmental Education (BRASIL, 1981). Federal Law No. 6,902 of April 1981 established new types of environmental preservation areas, including Ecological Stations for Research and Environmental Education (CZAPSKI, 1998).

Four months later in August 1981, the first Law, which placed Environmental Education as an instrument to help solve environmental problems was promulgated. This Law is considered the most important environmental law in Brazil, which establishes the National Environmental Policy (Federal Law No. 6.938/1981, BRASIL, 1981). In relation to EE, the text of this Law requires that it be offered at all levels of education (CZAPSKI, 1998).

Federal Law 6.938/1981 discuss about the importance of EE and proposes that it is suggest at all levels of education. In this way, it is believed that there will be a greater stimulus so schools and teachers accomplish an important role in the relations of enlightenment on the interactions between humans and the environment. In this sense, Silva (2012, p. 03) argues that: "the current environmental problem reveals, first and foremost, a crisis of civilization itself. It is not the nature which is in disharmony, is society itself". For this reason, is emphasized the importance of these aspects has already been discussed in

schools since the initial grades, in order for individuals to develop environmental awareness from childhood.

The Brundtlandt Report, also known as "Our Common Future" was published in 1987, which attributed the idea of "sustainable development", aiming in direction to discuss the impacts of this development as a whole, also reinforcing the indispensable ones relations between economy, technology, society and politics. This report also caught the attention to the need of support a new ethical attitude towards the preservation of the environment, marked by the challenge of a responsibility between the different generations of society in that moment (JACOBI, 2003).

In 1988, a special chapter (chap. VI) was adopted in the Brazilian Constitution for the first time in the country's history, which deals with the environment, characterized as a common good of the people and fundamental to the healthy maintenance of quality of life (BRASIL, 1988). In this text, it was attributed to the public power and the whole community the obligation to preserve the environment for the present and future generations (MEDEIROS et al., 2011).

In 1992, at the Rio 92 International Conference, celebrated in the city of Rio de Janeiro / RJ, Brazil, the Agenda 21 was elaborated, which "establishes a proposal for action focused on sustainability for the coming years, highlighting the need to build a school environmental education "(SAHEB, 2016, p.140). In this way, it is believed that in Brazil, this approach has been stimulated since the 1988 Constitution, and it has subsequently been improved and extended to contemporary contexts (OLIVEIRA et al., 2012). A few years after many meetings and conferences occurred in Brazil and the world to discuss environmental issues, on April 27, 1999, the then President of the Federative Republic of Brazil, Fernando Henrique Cardoso, sanctioned the Law establishing the National Education Policy Environmental (BRASIL, 1999).

The school and the formation of the citizen

The school has a great role in the formation of the citizen. The learning acquired during the school period will develop the social idea of forming a conscious citizen, that is, “the School as a place and institution with an important role for the development of the city, as well as of their habitants depending on existing practices” (MACIEL, 2012, p. 38). In this sense, OLIVEIRA et al. (2012) emphasize the importance of the school:

> Naturally, we are led to have a better understand of things, when we experience the practice and this makes us understand that the best way to teach the student to learn, is when the same happens to have direct contact with the object of study. The school plays the role of give to the student, the knowledge and understanding of the problems that are around us (OLIVEIRA et al., 2012, p. 2).

The school has the capacity of influence and modify the community where it is situated. However, it is from the theme of Environmental Education that it will be possible to provide a greater impact on society, through the construction of communication channels and reflections with the population about their influence on the environment (SANTOS, 2011). In the school environment, we need to find effective ways for each student to understand the natural phenomena, the actions of humans on the environment and the effects on all living beings. It is considered essential that each student develop a personal position and social attitudes of individual and collective growth, contributing to the development of a just society and, thus, resulting in a better environmental quality (EFFTING, 2007).

At school, science subjects, just as caring for the environment, do not need to be instructed exclusively in elementary school. Nature, the affection for the care of the land, and the enchantment presented by a simple blossoming of a flower need to be encouraged from infancy and stimulated during all stages of school formation (GRZEBIELUKA; KUBIAK; SCHILLER, 2014). In this sense, it is important to highlight that the role of environmental educator is not only the science teacher, because the EE is interdisciplinary, that is, it can be worked by teachers from different areas, since it is characterized as a transversal theme. Thus, it is important to indicate that all teachers (regardless of the training area) from the initial series encourage their students to have affection, care and respect for the environment.

The school must address environmental problems, using exercises that stimulate commitment beyond what refers only to human beings in particular, but also thinking of collectivity in search of equitable sustainability and a continuous teaching method based on respect for all forms of life (GRZEBIELUKA; KUBIAK; SCHILLER, 2014). Some schools develop projects that use EE (AZEVEDO, FERNANDES, 2010; BIANCHINI et al., 2015; EFFTING, 2007; OLIVEIRA et al., 2012; OLIVEIRA, TONIOSSO, 2014; SAHEB, 2016; SILVA; SANTOS, 2017). However, in many cases, these projects are developed in a short period of the school year, in specific schools in the form of projects, which are often

elaborated by students and teachers of higher education (CARVALHO; SIQUEIRA, 2017; FARIAS; MARACAJÁ, 2012; MACHADO, 2014; VIRGENS, 2011).

In this way, it would be necessary to implement the Discipline of Environmental Education, with the intention of get a better continuity of this subject throughout the school life. Thus, reaching not only the students, but also the whole community, therefore, according to Oliveira et al. (2012, p. 5) states: "The school has the role of providing the student with the knowledge and understanding of environmental problems in the environment in where he lives". Medeiros et al. (2011) discuss about how EE should be worked on at schools by saying that:

> Environmental education in schools contributes to the formation of conscious citizens, competent for deciding and acting in the socio-environmental reality in a way that is committed to life, to the well-being of each one and of society. For this, it is important that, more than information and concepts, the school intends to work with attitudes, values formation and more practical than theoretical actions so that the student can learn to love, respect and practice actions aimed at environmental conservation (MEDEIROS et al., 2011, p. 2-3).

Respect for the environment is fundamental for its conservation. In this sense, when the school works effectively in EE, the results are apparent throughout the community.

Environmental education and citizenship

At present environmental problems reveal, firstly, a crisis of the population itself. It is not nature that presents itself in disorder, it is human beings themselves and many of these disorders are caused by mismatches in the relationship between humans and the environment. We create a risk society and we have an obligation to manage it. Therefore, to adopt actions that help humanity to have affection for nature, instituting respect between the living beings which inhabit the planet, and learning to live with respect, with balance and responsibility with life, becomes indispensable (SILVA, 2012) . For Environmental Education, collective work becomes effective for the exercise of citizenship. About this, Jacobi (2003) discourse:

> Moreover, how does environmental education relate to citizenship? Citizenship has to do with identity and belonging to a collectivity. Environmental education as a qualification and exercise of citizenship refers

> to a new way of looking at the relation of man to nature based on a new ethic, which presupposes other moral values and a different way of seeing the world and humanity (JACOBI, 2003, 198).

In this way, EE becomes essential to instigate to change the social habits, citizen training and better living conditions. According to Fernandes (2010, p.81), "education for citizenship presents itself as a determinant element in the formation of participants and active individuals to assume the responsibility of fulfilling their duties and fighting for their rights." EE also has the role of alerting people as concerns the impacts of the environment, because it stimulates the human being to think. About that, Oliveira et al. (2012) declare:

> Thinking about environmental education is, above all, to think that it comes as an instrument of reflection in the search to be alerting people to think that certain attitudes taken by us, may be leading to pollution of our planet. It is necessary for the humanity to become aware that everything depends on us, so it is expected that environmental education will create awareness of the environment (OLIVEIRA et al., 2012, p.06).

EE teaching must be continuous, daily, and according to Jacobi (2003, p.198): "Environmental education must be a process of permanent learning that values the different forms of confection and form citizens with local and planetary awareness". The formation of the citizen enriched by fundamental environmental concepts, facilitates the relationship between human beings and nature; contributing to the improvement of the quality of life. In this sense, Maciel (2012) argues:

> Education is part of this social fabric and its participation in the context of society is of great relevance for not only became a vehicle for human formation, but also for the transmission of scientific, school and value content. It is through the educational process which it is intended that people, adopting a reflexive and questioning attitude, be able to construct the necessary elements for a quality life, composition of his relationship with other human beings and with the environment (MACIEL, 2012, p.42).

In order to get that Environmental Education reach the proposed objectives, it should not be only informative. For this reason, Environmental Education should also seek to be critical, instigating human beings to create affection towards the environment, stimulating

environmental awareness looking for the social change (MARTINS, 2009). From early grades, and childhood education, children learn values, respect for living beings and ethical principles. In this way, children can begin to be stimulated to have a critical-reflective view about problems associated to inequalities and disarrangements in the relationships between human beings and the environment. Discussing this matter, Menezes (2012) argues:

> In fundamental education the process of educating the individual in order to take his place in society, begins. After decades of debate, traditional education absorbed an environmental issue, bringing to it curriculum the employment of new didactic practices, adopting new pedagogical tools for sensitize the student to coach-him for the construction of a society better adapted to the precepts of sustainability, with a broad vision of their real and general problems, as the resources that can change the situation, with a greater focus on the school programs in the humanities and social sciences (MENEZES, 2012, p. 22).

In the school curriculum, some disciplines from the areas of Human and Social Sciences bring concepts of sustainability and conservation. However, Environmental Education cannot be considered as discipline in the fundamental and medium levels of education, it is worked in schools transversally. According to school planning, in some cases, Environmental Education is only worked as a form of a project. About this, Santo (2007) state:

> One of the ways, which can be used to study the problems of the environment, is through a specific discipline and can change the behavior of many students, making them influent people in the protection of the environment so that they become ecologically balanced and healthy. However, this discipline needs to have an application proposal, handling the specific topics of student interest, and not dissociated from the pedagogical proposal of the school (SANTOS, 2007, p.13).

Because of the lack of a specific discipline for environmental education in primary and secondary education, mentioning what MENEZES (2012, p.14) affirms about the importance of practical measures. Beyond to the theoretical discussions and propositions of Legislation on the subject - both already widely discussed and of recognized importance - when he expresses: "The current situation determines a more participatory and critical society in the

scope of public policies, therefore, it is important to strengthen the educational factor as a tool for the development of awareness of environmental issues". It is necessary to put into practice that academic production have already been widely published on the subject, as well as which is described in the current legislation. In this sense, it is perceived that Environmental Education constitutes an essential element in the formation of the citizen, stimulating the human being to develop a wider awareness about its role towards the environment where it is inserted.

CONCLUSIONS

Education is the basis of citizen formation. Thus, it is essential that children have a solid foundation in their training so that in the future they become citizens responsible for environmental conservation for all people, be it local, regional or global (DIAS 2006; FREIRE, 1996; MENEZES, 2012; SAHEB, 2016). Therefore, we can consider that Environmental Education, worked in schools as a specific Discipline from the initial grades and early childhood education, will facilitate the formation of conscious citizens about their role towards the environment, thus improving the relationship of humanity with environment.

Because childhood is a period of development, in this phase, questions related to the formation of character and ethical attitudes are acquired and taught, not only with nature, but also in the extended relations to the people around them and to the environment as a whole. In this phase, the teacher has great importance in the mediation of knowledge and it is up to him to seek better methodological strategies to contribute in the best way in the formation of the student / citizen, stimulating these people to become critical and reflective on current issues, in the broad and comprehensive understanding of environmental issues.

For Environmental Education to be worked as a discipline, it is necessary that teachers have training and instructions, in order to connect all students with the issues of interdisciplinary and transversallity, as well as the specifics issues of this area, so that the objectives of formation for the student / citizen aware of environmental questions are achieved. However, it must be considered that the problems of this lack of specific and adequate formation do not fall only on the shoulders of the teachers who carry out their activities in kindergarten, elementary and secondary education.

Universities and their undergraduate courses need to be adapted to the contemporary needs of pedagogical practices and effective approaches associated to inter and transdisciplinarity, as well as to the specificities of the area discussed in this text. There is a huge range of academic productions on this subject. However, the universities and their

undergraduate courses also have the role of putting into practice what they already have widely discussed in the form of publications of academic articles and books, as well as work on completing courses, specialization monographs, dissertations master's degrees, doctoral theses, etc.

It is also up to the educators, who develop their activities in undergraduate university courses, to provide competent pedagogical formation, closer to the reality that university students will find in a future job market in elementary and high school educators. In this way, professionals who will come to the labor market will be better equipped to handle environmental issues in a broader and more effective way, in accordance with the contemporary needs and reality experienced in schools.

Therefore, with this article, it is suggested that, beyond to the implementation of the Environmental Education Discipline in schools, actions should also be implemented to improve the quality of life of every community involved with the school. In addition, from Environmental Education it becomes possible to develop changes in the community, in the school and in the environment as a whole.

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