

**169 - PHYSICAL EDUCATION AND THE ENVIRONMENT: AN INEVITABLE RELATION**

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**INTRODUCTION**

A certain night in September/2006, at a restaurant in Ipatinga, Minas Gerais, looking at the dark sky, we were able to see a great number of stars. Turning our sight to the other side, we saw smoke coming out of chimneys of the several mega factories that exist in that city. We also felt the characteristic odor of a cellulose factory. The environmental issue seems insoluble in the Vale do Aço region, MG.

Nevertheless, in the region, we can call attention to some good projects that contemplate the issue responsibly: OIKÓS, developed by Acesita Foundation; XERIMBABO, by Usiminas and ESCOLA DE VIDA, by Cenibra. Therefore, facing the responsibility that the Centro Universitário do Leste de Minas Gerais has with the community, it is understood that the PE course will have to contribute to the comprehension of this important theme. For this reason, it is our purpose to study the relation between PE and the environment.

There are many scientific areas developing their speeches and practices on the environmental issue, didactically known as Environmental Education (EE) Medina and Santos (1999), Munhoz and Carvalho (2003), Seniciato and Cavassan (2003), Barcelos (2005).

Thus, a definition of environment according to the PCN: transversal themes - Brazil (1998), says: "it is used to indicate a space in which one lives and grows, trading energy and interacting with it, being changed by it and changing it" (my translation).

Leff (2001: 282) affirms that the concept of environment acquires new lights and shades, in which the reflection of each theme on the others will delineate new sources and open new application fields. The author defines environment as "a vision of the complex and synergetic relations generated by the articulation of biological, thermodynamics, economical, political and cultural processes" (my translation).

The human body should also be considered an environment that needs to coexist and be in harmony with the other environments, that suffer changes and alterations along its development process.

It is important to understand the environment not only in its physical aspect, but cultural, economical and political as well. Human beings and society have always establish a relation with the environment. Societies have always organized their relations with the environment in order to guarantee the production and reproduction of life (Boff, 2004). And human beings come from a long biological process and would not exist without nature elements, of which they are part and parcel. They are part of the biodiversity and their bodies are made of nature elements. So, the quality of the water we drink, the air we breathe, the food we eat affect our internal environment. There is an environment inside our bodies and the environmental health influences our physical, sensorial, emotional and mental health. The external pollution of the rivers corresponds to the one that runs in our blood. Any aggression upon the external environment attacks our senses of hearing, smelling, sight, touch and taste, and hurt our quality of life. In the same way, the quality of knowledge and education we receive impregnates our minds, sensations and emotions, guiding our behavior that can be, in a greater or smaller degree, aggressive towards life and the environment (Ribeiro, 2005).

Considering these propositions, it is noticed that mankind through his/her body (considering body as an environment) can accomplish and suffer environmental impacts.

The environmental issue became one of the most serious challenges that humanity has to face in a short time, because the guarantee of a future relies on a reflection about the human behavior towards the environment. According to Chaves and Farias (2005), humanity is part of nature and depends on it for survival, but it is given to civilization the power to modify nature, for better or worse, in a growing scale. This matter is both technological and ethics. It is necessary to search for new ways to make the technological development compatible with the environment quality.

Guilaine et al (1999) affirm that human beings domesticated the wild world, making it artificial and human like. They changed themselves, modifying their behaviors, habits and the relations with their fellow creatures. When left inhabited areas in search for new ones, man ignored the consequences of the damages he caused in the environment.

Man's body shape is also a product of the social and cultural environment that he belongs to. So, the body is affected by the social experiences, rules and values of the group it is inserted.

Once society had the necessity to use the prefix pos- to characterize itself, the human body also gets closer to the idea of pos-organic, getting distant of a natural organic and going towards a new concept of organ, a mechanic and computerized one. It is convenient to remember that man exceeds all of it. Even though man is subjected to the integration of society, he acts and interacts with the body, shaping it according to current values (Garcia, 2004). According to this author, man is self-constructed and situated in time and space, that is, situated timely and topographically.

For Schelling (2001), we only know things through symbols and in the symbols. Therefore, there is no concept of what things are once they are not represented. It is only understood how things act on others. The author emphasizes that we live in a world that is totally ours and we do not exist to others, but to ourselves. All the symbols of an exterior world develop from ourselves.

It is indispensable that mankind recognizes itself responsible for its existence, because its environment will be changed according to its behavior.

For Bachelet (1995), man's behavior is above all formed by habits, and it has always been difficult to modify what feels comfortable, even though, staying in a comfortable zone creates irreparable errors. To try to modify what most men prize, that is, their connection, seems risky, able to provoke many oppositions. However, to try to change the way to see things is not prohibited. To confront our ideas with other ideas is absolutely what was best done in communication.

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Nowadays the world's population causes preoccupation, especially when the reflection approaches the capacity of destruction of the environment by its inhabitants, which are active pollutants. It is time to extend the understanding of the ecological data, stressing that some of man's rights are indispensable substratum to life, for instance, the water, the soil. For that

reason, it is important that man recognizes him/herself as an environment, and together with the state, assumes a common management aiming at the ecological interests. The participation of the community to make decisions is crucial.

According to the PCN: transversal themes - Brazil (1998), the environmental perspective consists in a way to see the world as a place where the inter-relations and the dependency of diverse elements take place for the formation and maintenance of life. The environmental issue imposes to society the search for new ways to think and act, individually and collectively; new paths and production models of goods to guarantee human necessities and healthy social relations, as well as the ecological main stability. It implies a new universe of values in which education has an important role to perform. In this context, the school's tasks are to provide a healthy school environment, coherent to what it intends the students learn, and contribute to the formation of their identity as citizens, aware of their responsibilities with the environment and capable of making attitudes that protect and improve their relation with it.

For Emerson (2001), history is determined by the acts of special men. To learn to cultivate ourselves, would be the fundamental target, the search for harmony between man and nature. Because nature in its relation to man, is not only substance, but also the process and the result. All its elements work incessantly for man's benefit. Great actions teach us that the universe belongs to each individual that exists on it. This way, man needs to find or discover ways to balance the protection of the environment and the economical production, knowing that they are non-separable.

Man has a wonderful freedom, the free will. He/she can choose. And when choosing needs to discern and assume some facts. The environmental education helps the reencounter of man with itself, which is the first environment.

Reigota (1995), classifies the symbolic representation associated with the environment in three kinds: a) naturalistic, that evidences the natural aspects of the environment; b) anthropocentric, that privileges the use of natural resources for the survival of man; c) global, that evidences the reciprocal relations between man and nature.

Having in mind that the environment is what we are, it is indispensable that we search for self-knowledge, so the errors made in the past, for ignorance, helps us reflect about the current and real situations. Then, the planet awareness emerges, expands and improves the relation between man and environment. To be a cultural transformation agent is a challenge for man, because it implies changes in life style and daily life. The formal education can and should exert a fundamental role in this transformation.

It is urgent that the PE professionals recognize his/her compromise in helping others understand this attitude as one of his/her professional competences. According to Garcia (2002), it is our responsibility, people from sports and physical education, to question about what we are, where we live, where we are and where we are going. So by knowing ourselves and the circumstances, we can interfere in the inner of society with or through sports.

For Krebs (2002), on one side the preservation of nature places us closer to a greater concept of ecology, on the other, the practice of sports brings us to a more specific field, the ecology of the human development. According to this point of view, man interacts with nature in basis of a dynamic balance.

The search and construction of an inter-, multi- and transdisciplinary paradigm, able to approach the environmental issue in total, is a collective challenge. It can only be achieved with the effort of teaching and searching institutions, the state and the organized civil society (De Paula, 1997). Nevertheless, science is not out of this effort and should comprehend more and more its objects. The core is sharing, the construction of a common territory of languages, concerns, transformation of theories, methods and conceptions towards transdisciplinary, in the search for paradigm changes in the several subjects,.

### FINAL CONSIDERATIONS

Even small facts can cause serious disasters in the environment and the community. They deserve attention, guidance, thus, education. We cannot neglect or deviate from these issues. It is an ethics and political position, in which scientific neutrality and exemption cannot happen. Some environmental problems have a worldly backwash, independently of the place where they were originated. Therefore, the environmental issue asks for forms of education, awareness, control, monitoring and measures based on cooperation, from a regional field to an international one.

It is noticed the importance of this study and the understanding of mankind as an environment. The environmental issue is placed as a great challenge to the academy, to science and technology, because it asks for new knowledge about reality and new technologies, and compatible behaviors with a new concept of development. This scene send us to the Brazilian educational reality, which calls for the contribution of PE teachers to the environmental theme.

### 1. References

- BACHELET, Michel (1995) **A Ingerência Ecológica. Direito Ambiental em Questão**. Tradução: Fernanda Oliveira. Instituto Piaget, Portugal.
- BARCELOS, Valdo (2005) "Escritura" do mundo em Octavio Paz: uma alternativa pedagógica em educação ambiental. In: SATO, Michele e CARVALHO, Isabel Cristina Moura (org.) **Educação ambiental: pesquisa e desafios**. Porto Alegre: Artmed.
- BOFF, Leonardo (2004) **Ecologia: grito da terra, grito dos pobres**. Rio de Janeiro: Sextante.
- CHAVES, André L., FARIAS, Maria Eloísa (2005) Meio ambiente, escola e a formação dos professores. In: **Revista Ciência e Educação**, v. 11, n. 1, p.63-71.
- DE PAULA, João Antônio (coord.) (1997) **Biodiversidade, População e Economia: uma região de mata atlântica**. Belo Horizonte:UFMG/Cedeplar; ECMXC;PADCT/CIAMB.
- EMERSON, Ralph Waldo (2001) **A Natureza**. Tradução: Berta Bustorff Silva. Sinais de Fogo. 1ª edição, Lisboa.
- GARCIA, Rui Proença (2004) Antropologia do Desporto: O Reencontro com Hermes. In: PIRES, Gustavo. **Cultura e Desporto**. Centro de Estudos dos Povos e Culturas de Expressão Portuguesa. Universidade Católica Portuguesa. Lisboa.
- \_\_\_\_\_. (2002) Desporto, Formação Profissional e Qualidade de Vida. In: MOREIRA, Wagner Wey e SIMÕES, Regina (org) (2002) **Esporte como Fator de Qualidade de Vida**. Piracicaba: Editora UNIMEP, São Paulo.
- GUILAINE, Jean; CLOTTES, Jean; LANGANEY, André e SIMONNET, Dominique (1999) **A mais bela história do Homem**. EdiçõesASA. Porto, Portugal. 1ª edição.
- KREBS, Ruy Jornada (2002) Esporte, Meio Ambiente e Qualidade de Vida: um entrelago mediado pela perspectiva ecológica. In: MOREIRA, Wagner Wey e SIMÕES, Regina (org) (2002) **Esporte como Fator de Qualidade de Vida**. Piracicaba: Editora UNIMEP, São Paulo.
- LEFF, Enrique (2001) **Saber Ambiental**. Petrópolis: Vozes.
- MEDINA, Nana Mininni e SANTOS, Elizabeth da Conceição. (1999) **Educação ambiental: uma metodologia participativa de formação**. Petrópolis, Rio de Janeiro: Vozes.

MUNHOZ, Regina Helena e CARVALHO, Lizete Maria Orquiza (2003) Educação Matemática e a Educação Ambiental: atividades interdisciplinares e a transversalidade do tema "Meio Ambiente". In: TALAMONI, Jandira e SAMPAIO, Aloísio Costa (org) **Educação ambiental: da prática pedagógica à cidadania**. São Paulo: Escrituras Editora.

REIGOTA, M. (1995) **Meio ambiente e representação social**. São Paulo: Cortez.

RIBEIRO, Maurício Andrés (2005) **Ecologizar: pensando o ambiente humano**. Brasília: Universa.

SCHELLING, F. W. J. (2001) **Idéias para uma Filosofia da Natureza**. Centro de Filosofia da Universidade de Lisboa. Imprensa Nacional-Casa da Moeda. Lisboa. Tradução, prefácio, notas e apêndices de Carlos Morujão. Revisão da tradução de José Miranda Justo.

SENIÇIATO, Tatiana e CAVASSAN, Osmar. (2003) Para além da razão: reflexões sobre o papel das emoções e das aulas de campo em ambientes naturais no ensino de ciências e em educação ambiental. In: TALAMONI, Jandira e SAMPAIO, Aloísio Costa (org) **Educação ambiental: da prática pedagógica à cidadania**. São Paulo: Escrituras Editora.

## 2. Official Documents

BRASIL (1998) Secretaria de Educação Fundamental. **Parâmetros curriculares nacionais: terceiro e quarto ciclos: apresentação dos temas transversais**. Brasília: MEC/SEF.

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## PHYSICAL EDUCATION AND THE ENVIRONMENT: AN INEVITABLE RELATION

### ABSTRACT

The purpose of this search was to study the relation between Physical Education (PE) and the Environment. We understand that PE will have to contribute to the comprehension of this important theme, being open to new speeches and practices, searching for new ways for the profession and giving answers to the challenges that come all the time.

The environmental issue became universal and has synthesized great current challenges: it has incorporated and requested help and actions from several areas of knowledge. It is consensual the necessity to surpass the monodisciplinary paradigms. It is extremely important that the PE professionals recognize as their competence to help others understand this fact, and the process of humanity evolution.

Key-words: Physical Education and environment

## ÉDUCATION PHYSIQUE Et ENVIRONNEMENT: UNE RELATION INÉVITABLE

### Resume

L' intention de ce travail, était d' étudier la relation entre l' Éducation Physique et l' Environnement. C' est de notre conception que l' éducation Physique devra également contribuer à la compréhension de cet important thème tout en s' ouvrant à de nouveaux discours et pratiques, en se mettant en perspective sur de nouvelles voies pour une profession qui doit se renouveler à chaque instant tout en répondant à tout moment, aux défis que le temps nous apporte. La question environnementale est devenue universelle et elle est parvenue à synthétiser les grands défis de l' actualité dans la mesure où, elle a passé à incorporer et à solliciter l' aide et des actions dans divers domaines de connaissance. La reconnaissance de la nécessité de surmonter les paradigmes monodisciplinaires, est un fait consensuel. C' est d' une extrême importance que le professionnel d' Éducation Physique reconnaisse son engagement vis-à-vis de l' aide à l' entendement de ce fait, comme aussi ce fut le cas de l' entendement du processus évolutif de l' humanité à l' intérieur de sa compétence professionnelle.

Mots-clés: Éducation Physique et Environnement.

## EDUCACIÓN FÍSICA Y MEDIO AMBIENTE: UNA RELACIÓN INEVITABLE

### Resumen

El propósito de ese trabajo fue estudiar la relación entre la Educación Física y el medio ambiente. Es de nuestro entendimiento que la Educación Física tendrá también que contribuir para la comprensión de este importante tema, abriéndose a nuevos discursos y prácticas, perspectivando nuevas vías para una profesión que tiene que renovarse a cada instante, respondiendo a cada momento a los desafíos que el tiempo trae. La cuestión ambiental se cambió a nivel universal y tiene conseguido sintetizar grandes desafíos de la actualidad, en la medida en que pasó a incorporar y a solicitar auxilio y acciones de las diversas áreas de conocimiento. Es consensual el reconocimiento de la necesidad de superar los paradigmas monodisciplinarios. Es de extrema importancia que el profesional de Educación Física reconozca su compromiso en auxiliar el entendimiento de ese hecho, bien como el entendimiento del proceso evolutivo de la humanidad, dentro de su competencia profesional.

Palabras llaves: Educación Física y medio ambiente.

## EDUCAÇÃO FÍSICA E MEIO AMBIENTE: UMA RELAÇÃO INEVITÁVEL

### Resumo

O propósito desse trabalho foi estudar a relação entre a Educação Física e o meio ambiente. É nosso entendimento que a Educação Física terá também que contribuir para a compreensão deste importante tema, abrindo-se a novos discursos e práticas, perspectivando novas vias para uma profissão que tem que se renovar a cada instante, respondendo a cada momento aos desafios que o tempo traz. A questão ambiental tornou-se universal e tem conseguido sintetizar grandes desafios da atualidade, na medida em que passou a incorporar e a solicitar auxílio e ações das diversas áreas de conhecimento. É consensual o reconhecimento da necessidade de superar os paradigmas monodisciplinários. É de extrema importância que o profissional de Educação Física reconheça seu compromisso em auxiliar o entendimento desse fato, bem como o entendimento do processo evolutivo da humanidade, dentro da sua competência profissional.

Palavras-chave: Educação Física e meio ambiente.