

# What kind of public school do we need to confront the ecological crisis?

## Public schools and environmental responsibility

**Ángela Zambrano Carranza\***

### **Summary**

In the context of the ecological crisis manifesting itself through climate change, loss of biodiversity and a lack of water that is safe for human consumption - all caused by the dynamics of capitalist economic growth and development that separate nature and humanity - what type of public school is needed to confront the ecological crisis? We need to create a new educational paradigm that involves attitudes and aptitudes that are responsible for and sensitive to nature and that go beyond romantic ideas of saving the environment through volunteering. In other words, it is necessary to develop an eco-pedagogy that teaches, through critical thinking, the fundamental relationship between nature and human beings.

---

\* Central University of Ecuador. E-mail: [ecoangela@yahoo.com](mailto:ecoangela@yahoo.com)

### **Introduction**

In recent decades the global environmental crisis has reached alarming and unprecedented levels, already placing us on the verge of the sixth mass extinction of life on this planet. The causes are mainly human activity and development models which assume no commitment to environmental responsibility despite the unsustainable use of natural resources and the abrupt changes caused to the Earth's natural systems. In this context, it is urgent for the educational community to come up with new ideas and actions which contribute to preventing ecological collapse from the perspective of joint responsibility and environmental justice. Public schools have a fundamental role in this scenario. They must shape individuals who are responsible for their surroundings, critical of decisions taken by those who govern them and proactive in practices of responsible

consumption. It is incumbent on all actors to train themselves in environmental citizenship, everyday science, political ecology and critical and emerging epistemology in order to contain the ecological crisis. The traditional educational system cannot provide these tools; therefore, it is a matter of finding new avenues for analysis and critical reflection by conscious and responsible educational communities. From within the field of education, we seek to break down ideas of hegemonic and economic development, looking for alternative ways to emerge from the various manifestations of the crisis, among them the environmental crisis.

### **The ecological crisis in our time**

In 1869 the German biologist Ernst Haeckel coined the term “ecology,” defining it as the study of interdependence and interaction between live organisms and their surroundings. Today this science embraces not only the natural world but also culture and society, which has led ecologists to conceive it as a joining of sciences acting in an interdisciplinary manner and concerned with the study of human actions with and within the environment.

The harmonious relationship which must exist between the elements of the ecosystems and the planet’s capacity to self-regulate has been seriously disturbed, to such an extent that we are speaking of a genuine ecological crisis which puts life on this planet at risk. For Crevarok (2006, p. 238) “the frontier between the human and natural worlds is production, that is to say, the conscious transformation of nature for human ends.” This production entails an irrational consumption of natural resources and services which prevent the fulfilment of ecological processes, in turn provoking the degradation of nature. It is undeniable that the ecological crisis has capitalism as one of its central causes and as its growth is sustained, the crisis also grows, putting all forms of life at risk of extinction. The massive sixth extinction is driven by humans and has already been initiated by the metabolic rupture between society and nature which the capitalist system has provoked.

To preserve the future of the planet’s species and achieve equity in access to and benefits of natural goods, without compromising that capacity for future generations, requires that capitalism be defeated and replaced by a society that thinks and acts in an ecological manner. This means also eliminating the persistence of private property and hoarding of resources in a few hands. It is the responsibility of government authorities and world leaders to opt for models of sustainable production. Transnational businesses must also commit themselves to the application of eco-friendly and socially responsible systems.

We agree with Crespo, J. et al (2018, p. 12) when they point out that “there is currently an over-determination of the social over the natural . . . the great human metropolis needs to satisfy its needs created and recreated by consumption and break the harmony that exists between open spaces and habitable spaces.” We certainly do not need everything that industries and businesses produce. They create artificial needs, which entail an exacerbated exploitation of resources, generalized contamination of the environment and magnification of environmental problems. “To understand capitalism, it is crucial to understand it as a framework of relations and not as the sum of elements which come together by accident” (Crespo, J. et al, 2018).

As is evident, the ecological crisis constitutes one of the effects of capitalism, with symptoms such as climate change, loss of biodiversity, scarcity of fresh and secure water for human consumption, the transformation of fragile ecosystems into degraded spaces and the acidification of oceans, among others. Hence, the urgent need to change behavioral patterns and to take up the defiant stance of transforming extractivist behaviors through values and actions that are environmentally friendly.

The technological revolution has accelerated globalization, which in the social realm has provoked profound gaps and inequalities between nations and peoples. In the same way, capitalist production predominates at the cost of the planet’s limited resources and the appropriation of the work force.



PHOTO: "ENVIRONMENTAL EDUCATION IN PUBLIC SCHOOLS". SEMARNAT

### **Education and environmental training**

Without forgetting that responsibilities are differentiated, without a doubt all inhabitants of the planet have a role in caring for our enormous house, the planet on which we live. Some of the solutions have to do with our way of thinking, valuing, and acting in our surroundings. We require a new way of seeing the world, of understanding it and of valuing it--a paradigm shift in order to live on a planet finite in natural resources.

Traditionally we have spoken of the need to develop strategies for environmental education (EE). Molina, J (2019) concludes in his article that:

“In the investigations presented, the difficulty of promoting a genuine environmental consciousness through EE is evident, and this is due to the weak notion regarding this theme that still prevails on the part of practicing teachers, who maintain a traditional, decontextualized, anthropocentric conception (p. 107).”

This conclusion is convincing, and one must not lose sight of it when considering environmental edu-

cational proposals. A mixture of voluntarism and romanticism prevails, with supplementary activities that try to show that the school is concerned with the state of the environment.

What's needed is a new paradigm with a different educational process, which means adopting responsible attitudes and aptitudes about nature with a focus on joint social and planetary responsibility. Schools have the responsibility of promoting an environmental sensibility leading to an ecological consciousness and of developing an eco-pedagogy for teaching and learning which is critical of the relations that human beings establish with our natural environment.

It is necessary to emphasize that not all educational systems have assumed or will assume this responsibility. In some educational systems there persists—in the words of Paulo Friere—a banking model of education; others, by contrast, promote greater extraction and the beneficial use of natural resources, in which nature constitutes a deposit of resources to be exploited in the name of development and for the benefit of a few sectors.



PHOTO: LA REGIÓN, NEWSPAPER OF THE JUDICIAL DISTRICT OF LORETO

Public education must opt for eco-pedagogy, which promotes care for life in all its manifestations and searches for the best conditions—with justice and equity—for all the present and future inhabitants of the planet. A pedagogy which seeks profound changes in social, economic, cultural and environmental structures, in which human beings stop being the centre of the world and start to value in an integral way everything that surrounds them – to value our great house.

We must ask ourselves then: what kind of public school do we need to confront the ecological crisis? How do we rebuild the public school? The answers can be many, but first we require individual and collective decisions to act. We speak of rebuilding because public schools need to re-evaluate, recreate and re-think themselves and to recover from so much manipulation and abandonment. We need schools that recover and live out the principles of equality, justice and co-existence in diversity. Defending the public sphere implies a profound awareness of collectivity and the free exercise of rights.

From this perspective, the public school must commit itself to the development of an eco-pedagogy with a curriculum different from the traditional one. A curriculum in which ethical principles of protecting life are given priority and which trains and educates for a

sustainable present and future. A curriculum which brings a contra-hegemonic educational approach that is sensitive and responsible to the environment.

Strategies of intervention must involve all aspects of education; that is, curriculum development, teacher training and the application of methodical strategies for situated learning. One point of departure would be to interpret the immediate environment, with both a local and global perspective, to then propose alternative responses of prevention and solution in the face of the environmental crisis.

Because of this, the educational stakes go beyond preserving natural resources. It is essential that we search for a balance between the social and the environmental which can shape human existence in harmonious relation with other living organisms and the environments in which they develop. Let us remember that many cultures see elements of nature as living, such as the soil, water, mountains or species which have constituted genuine deities in various cosmovisions.

We do not propose a divorce between the technological and humanistic spheres. On the contrary, it is necessary to reflect on the limits entailed by an economic model which imposes unsustainable lifestyles, provokes

artificially created needs and irrational consumerism and which carries out the super-exploitation of resources and general environmental contamination. Education to protect the environment, together with critical pedagogy, must question the order of things, the system which threatens life.

Curricular contents and objectives must contextualize the reality of the area where members of the educational community live and recognize the territory as the dynamic space where life, with all its interactions, is developed and adapted to current problems with a vision for preventing others. Embracing one of the approaches of the UN Decade of Education for Sustainable Development, it is a matter of teaching-learning to transform and transform ourselves intentionally and continually.

Teacher training will be oriented toward solid training in environmental material and an understanding of ecosystems, with innovative methodologies which help to interpret and value the environment. This will further sensitivity and environmental consciousness in the educational community as well as develop skills to act responsibly in daily life.

In summary, public schools must develop an eco-pedagogy, in which the centre of attention is life, the

Earth, our home. They must promote an education which understands that ecological processes sustain life on the planet and that social processes can affect them in an irremediable manner. It is a matter of urgently promoting a mode of environmental citizen education.

## References

Crevarok, C. (2006). Capitalism and the “ecological crisis”. Marxist approaches. “Luchas de Clases” magazine. No. 6. pp. 235-246. Argentina. <https://www.ips.org.ar/wp-content/uploads/2011/03/El-capitalismo-y-la-crisis-ecologica.pdf>

Crespo, J. et al. (2018). Ecomarxism: Myth or reality in the open society. *Revista Espacios*. Vol. 39 (N° 09). p. 12. <https://www.revistaespacios.com/a18v39n09/a18v39n09p12.pdf>

Llorente, M.A. (2017). What is the public school? Colección: Recursos educativos. Serie: El diario de la Educación. Ediciones Octaedro. Barcelona.

Molina, J.T. (Enero-Junio de 2019). Defining environmental education in the face of the ecological crisis. *Revista Gestión y Desarrollo Libre*, 4(7), (97-111). [https://revistas.unilibre.edu.co/index.php/gestion\\_libre/article/view/8134/7277](https://revistas.unilibre.edu.co/index.php/gestion_libre/article/view/8134/7277)

