

Higher education and the environmentalization of its curricula

Abstract

Formal higher education through higher education institutions has long been identified as an institutional entity that should work to incorporate environmental issues into the curriculum in order to transform the environmental culture of its students, teachers, and educational authorities, transforming their consumerist, predatory, and indifferent characteristics into a new, more critical, transformative, and innovative culture that improves disciplinary skills, attitudes, behaviors, and negative actions the environment, recognizing the reality that we live in and the guilt and/or responsibility that “homo sapiens” has had in environmental degradation.

Keywords: environmentalization, education, environmental degradation

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Introduction

The new era of globalization has been impacting education, knowledge, and above all, culture, in diverse and rapid ways. Within this context, one of the greatest challenges is to guide these changes toward rebuilding a society that is currently predatory, consumerist, and largely insensitive and indifferent, into one more aware of the negative reality we are experiencing as a consequence of our attitudes, behaviors, and actions.

To this end, education itself needs to be reconsidered in terms of its current structure, orientation, operationalization, and objectives and goals, especially higher education, which, despite everything, basically fulfills its purpose according to the historical and social context in which it was conceived and the intended purpose of each of the disciplinary professions taught by public and private higher education institutions (HEIs). This approach involves rethinking it to generate individuals with the general and specific competencies of each undergraduate program, who, thanks to the acquisition of a greater and better critical, creative, and innovative capacity, are able to observe, understand, and comprehend situations of confrontation and crisis in contexts of social competition, possess leadership skills, conflict resolution abilities, cultural understanding, a relational mindset, and access to modernity. Likewise, the entire educational process should be linked to everyday phenomena and events that depend as little or not at all on excessive and irrational consumerism in most cases.¹

From this perspective, it is easier said than done, since the meaning of education and learning currently operates in inter- and transcultural contexts, in different places as a consequence of the trans nationalization of educational processes. Therefore, when we talk about transformation, we must speak and think in a collective, holistic, and up-to-date way, referring to individual, collective, and global situations, such as the environmental crisis, which is currently one of the main critical problems facing planet Earth. Among its many situations and consequences, climate change and its effects-atypical and intense heat, cold, rain, fires, floods, etc., occupy one of the main concerns. This is precisely where the difficulty of this situation lies: truly achieving the planning and implementation of an effective educational policy that genuinely leads to the environmentalization of curricula in higher education institutions with the capacity and intention to generate pro-environmental awareness as one of the most

viable and feasible alternatives to confront and curb environmental uncertainty and deterioration.

Historical and social process of education

Education, in general terms, has almost always been misunderstood and misinterpreted by the majority of society, as it is thought of almost exclusively as a formative-social process of generating operational behaviors and not as the transformation of knowledge, understanding, and consciousness of the individual. This situation is partly a consequence of the fact that it has always been substantially controlled by the State, which considers and uses it as an instrument of control and negotiation. It is shared and delivered operationally according to the diverse political, social, and cultural contexts of each country or nation.

This scenario has its roots in the current situation created by the isolation of schools from life and diverse everyday realities. Higher education institutions have become, or are gradually becoming, insensitive, passive, monolithic, artificial, and isolated spaces, based on an illusory discourse that claims these spaces allow the transmission of an objective, advanced, and cutting-edge vision of the modern world. They speak of the micro and macrocosm, but from the perspective of how it is perceived by hegemonic political and economic leaders a message that usually does not withstand questioning of subjectivity, rationality, and reality. Consequently, when a subject with a diametrically opposed analytical vision of the collective and global environment emerges, demonstrating that reality is not exactly as it is presented to us, conceptual, epistemic, and even existential conflicts arise.

Consequently, if the student and later the graduate as a professional are to be able to understand and explain the real world, this can only be achieved when the educational paradigm used is changed, and thanks to this, it is possible to deconstruct existing knowledge and reality in order to then build something new that gives the possibility of accommodating all universal, spiritual, religious, poetic, astrological, mythical, intuitive, mystical, rational, etc. knowledge, as long as it passes through the evaluation of reason and epistemic scientificity.²

Higher education and the new environmental paradigm

Today's society requires transformation, and this will only be achieved if education evolves toward more realistic and transformative

paths not from the individual through the environment, but from the environment through the individual. Higher education institutions (HEIs) must truly fulfill their role not only as trainers of skilled human resources for the local, regional, and global labor market, but also become the most powerful social asset for bringing about structural changes within society itself and in the consciousness and culture of the educated individual. In this sense, Edgar Morin, one of the most important thinkers, sociologists, and philosophers of contemporary Europe, argues that one of society's greatest challenges is to modify its thinking to cope with the complexity, the rapid pace of change, and the unpredictability that characterize our current reality.³

In this context, higher education must be the primary driver of this shift in our worldview. It must begin by acknowledging that we are providing a flawed education, lacking the capacity to observe, understand, and seek solutions to various problems, particularly those involving the environment and its devastation. We continue to prepare graduates with a fragmented view of reality, a utilitarian, operational, and above all, consumerist ideology. Unless we change our educational paradigm, we will never recognize that society in general, and the individual in particular, is responsible for the social, economic, cultural, and political deterioration, and in this case, the environmental decline that our planet is experiencing and suffering. Therefore, higher education institutions must be the primary stakeholders in restructuring their curricular content and procedures according to a logic that allows authorities and faculty, first and foremost, to understand social complexity and the importance of active participation for development but for sustainable development in the fullest sense of the term.

Currently, there are many important problems that have not yet been addressed or resolved within the field of education. Among these important problems, some are more significant and urgent, such as the critical environmental situation unfolding worldwide, the consequences of which many populations are already experiencing. It is essential to consider and cultivate, through education and its critical mass, the contribution of ideas and knowledge so that these can be understood and applied by all students and subsequently transmitted and replicated by society at large. Regarding the care and protection of the environment, it is highly feasible for higher education to become a vantage point from which to seek solutions to this complex environmental problem. By incorporating environmental issues and contexts into students' professional training, applicable within their chosen disciplines and professions, awareness and greater responsibility can be fostered regarding the environmental impact of professional practices. Education and professional training based on environmental knowledge strengthens actions to contribute to the transformation of the population and to the preservation of a healthy environment.⁴

This situation in itself constitutes a challenge not only for higher education but for all education in general; In this sense, it can be said that it is currently extremely essential for higher education institutions to carry out an educational process that is contextualized and in harmony, both internally and externally, with the environment. It is important at this moment to begin educating young people, future professionals and consumers, and potentially environmental detractors, due to a lack of environmental awareness and a lack of a vision of progress and sustainable growth. This will allow them to become the link from which to begin educating children, adults, and senior citizens. In turn, this educational situation will broaden public and social opinion with timely, truthful, and accurate information. This will enable a society educated and trained under a new environmental and development paradigm to compel, first and foremost, its social

environments and subsequently its authorities, as well as companies and industry, to be more responsible with their production processes and finished products through extended producer responsibility. This means that the product's creator assumes the commitment and responsibility to track the product from the moment it leaves their facilities until it reaches the end of its useful life and is either deactivated or sent for recycling.

What is curriculum environmentalization?

From the perspective of our professional training and experience, we consider curricular environmentalization to be the process of mainstreaming sustainability, ecology, and environmental awareness criteria across all levels, content, and practices of teaching and learning. This approach seeks to modify curricula and pedagogical and didactic methodologies to foster an education throughout the school community committed to environmental protection, nature, and sustainable development, not by adding new theoretical content, but by transforming existing content within a context and relationship to a pro-environmental disciplinary and institutional culture.

We believe that this process should be considered, planned, and executed based on four fundamental pillars: the first involves a review and analysis of the curriculum and its programs to include environmental topics and contexts in an integrated manner. Teacher training should equip educators to work with their content from an environmental perspective, use transdisciplinarity to understand and frame environmental complexity, and carry out institutional management to implement pro-environmental actions within the higher education institution (coherence between words and actions).⁵

The above is framed within the context of key objectives related to environmental integration, addressing the transformation of traditional anti-environmental education into a new, contextualized approach within the specific work and social environments of each professional. This approach utilizes cross-curricular themes to integrate the environmental dimension into all subjects, courses, and content, with the aim of raising awareness and fostering action to solve environmental problems through environmental education as a complement to the disciplinary instruction provided. In short, we believe that environmentalizing the curriculum means educating citizens capable of acting responsibly and transforming their consumption and production practices toward more viable and sustainable development.

What has been done regarding the environmental crisis and the environmentalization of curricula in higher education institutions?

Enormous efforts have been made by international organizations such as the United Nations (UN) for quite some time to address education and its environmental context, as well as the use and application of support and tools such as the media for this purpose. Unfortunately, much remains to be done, and there are still much resistance and many obstacles to overcome. The new context in which we live due to globalization imposes on higher education, and particularly on higher education institutions (HEIs), a process of curriculum redesign. This entails redefining concepts and rethinking educational priorities for the development and use of natural and man-made resources. It also requires rethinking investment in educational technology to enable the transformation of institutions, production, distribution, and consumption processes, as well as a change in how we see and think about our world.

Including environmental dimensions and concepts in higher education curricula is inherently complex, stemming from the interaction of diverse socio-environmental processes that require not only a theoretical but also a practical approach for their understanding and resolution. In this context, fostering critical thinking in students will enable them to systematically question the information provided, leading to a broader awareness and new perspectives on reality. Without epistemological, pedagogical, psychological, and social approaches to the new educational paradigm, it will be impossible to truly integrate environmental knowledge and sensitivity into the broader context of the professional discipline. Consequently, graduates will lack a realistic vision of the cosmos, where everything must be in harmony with everything else.

Basically, the issue of environmental education began in October 1975 at the meeting organized by the UN in Belgrade, Yugoslavia, called the International Seminar on Environmental Education (2009). There, the main guidelines were established that allowed for determining the goals to be achieved with educational processes oriented towards sustainable development in a document called the Belgrade Charter. Essentially, this document was aimed at ensuring that societies worldwide develop an awareness regarding the care and importance of the environment for proper development and overall health, possessing the knowledge and connections, along with the development of skills, attitudes, and motivations to work for the collective and individual benefit, as well as in the search for solutions or alternatives to the diverse and complex problems that exist or may arise, including appropriate personal and interpersonal relationships.⁶

Since that meeting, there have been constant meetings, conferences, workshops, symposia, analysis panels, etc. sponsored and organized by institutions, groups, NGO and non-NGO organizations such as Earth Action (EA), International Environmental Liaison Center (ELCI), Friends of the Earth (AT), Greenpeace International (GI), International Federation of Environmental Journalists (FIPA), Intergovernmental Panel on Climate Change (IPCC), United Nations Environment Programme (UNEP), World Rainforest Movement, World Wildlife Fund (WWF), Organization for Economic Co-operation and Development (OECD), Regional Cooperation Centre for Adult Education in Latin America and the Caribbean (CREFAL), among many others, all of them in the search for solutions to the diverse environmental problems and the understanding and correction of their consequences; In this sense and context, the United Nations (UN) through its Secretary-General has been the main promoter of the care and recovery of the environment by generating a pro-environmental awareness through educational processes at all levels, working on what is currently known as the environmentalization of curricula.⁷

Conclusion

The current recommendation (and possibly soon the mandate) to incorporate a comprehensive curricular environmentalization process and public commitment to the environment and sustainability,

starting from academic and social training in all aspects within higher education communities, as well as achieving awareness and generating consciousness through the expansion of knowledge that allows understanding and confronting the current state of environmental crisis, developing values that foster more positive attitudes and a better and greater promotion of the participation of the entire school and educational community, as well as its connection with society, is the great challenge facing higher education.

Due to the limited development of environmental stewardship and sustainable development within higher education institutions, there is no general consensus on what constitutes curricular environmentalization and its importance, leading to misinterpretations in many places. This situation should primarily prompt educational authorities to establish regular sessions within their institutions so that their communities can analyze the concept and identify its specific characteristics, particularly in relation to the strengths and opportunities presented. Through this process, awareness will be raised, and a more conducive individual and collective culture will begin to develop, better equipped to address current and future environmental challenges.

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None

Conflicts of interest

The authors declare that there are no conflicts of interest.

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