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Sustainable Development or Sustainability? The Role of Higher Education

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Abstract

In different contexts, there is the idea that higher education, through an intricate system of institutions and organisations, pays for society in line with its own well-being. The environmental crisis of our time raises the need for higher education institutions (HEIs) to contribute to the sense of sustainability: sustainable development has gained wide ground in this regard, however, it is limited by different aspects. Sustainability implies a reformulation of the production and consumption models, and a transformation in the current structures, although many times this transformation represents a threat to the practices that have been perpetuated for several decades.

Keywords: sustainability, sustainable development, business education, higher education, environmental education

JEL Classification Code: I25

Introduction

Given that sustainability is a newly incorporated notion in higher education institutions (HEIs), this article seeks to describe some important considerations for its incorporation. The criterion for including texts in this analysis is that they should be Latin and Anglophone publications that relate the role of HEIs with the necessary transformation in the face of the current socio-environmental crisis. The focus of interest in this literature review is the university institutionalisation of sustainability.

Faced with the environmental crisis, the role of HEIs acquires great importance, a challenge that, although it seems to have a clear definition, is not structured in the manner of a cooking recipe or an instruction manual. Currently, we need to develop societies that consider the challenge of the culture of sustainability, and that is not limited only to a regulation or a legal reform of the frameworks for the use of natural resources, but societies that profoundly transform their economic and social structures and their relationship with the environment.

Beginning in the second half of the 20th century, the global environmental and social crisis triggered a process of reflection on the social and economic model posed by the evolution of civilisation around a vision of development and/or economic growth. Starting in the 60s of that century, this approach is positioned in different political, economic, or social arenas, and from the treatment of the subject different aspects have been elaborated and different positions have been consolidated in which different agendas, organisations, or communities are articulated to accommodate an issue that seems to be gaining importance in the face of the environmental and social crisis that has greatly escalated since then.

This reflective process has proliferated in different spheres: business, social, commercial, etc., and without a doubt, it is now a topic that must be tackled almost mandatory in higher education institutions (HEIs). From different angles, the institutions of higher education of today see the need to establish a position in this regard and to exercise it in their educational procedure. In Latin America, this process represents a double challenge since it implies a dislocation from colonial thought.

In this sense, the role that HEIs play in society, the generation of knowledge and the preparation of professionals, is recognised in terms of responding to current

challenges: one of the most urgent and complex being the environmental crisis and climate change. Sustainability is seen as a broad response to such problems. Considering HEIs´ functions related to teaching-learning, research and outreach, their role is central in this task.

Background

For Gudynas (2011a), the current development model emerged from the Second World War as a response to the latent situation in several European countries of poverty and inequality in the distribution of wealth. In this context, says Gudynas, development raises the need to increase production and income per person, as if this expansion process could lead to a better quality of life for all. In this same classification, different countries are classified according to their level of development (developed or underdeveloped countries), trying to reflect which nations were in a better condition or more advanced in the expected path towards development. This paradigm is reflected in the establishment of different policies and programmes aimed at the modernisation of a 'backward society' on the verge of being developed.

This model is linked for Giroux (2018) to an establishment of neoliberal policies in different contexts and in different social institutions such as governments. The neoliberal model is characterised by economic Darwinism, related to processes of privatisation, commodification, free trade, and state deregulation. Neoliberalism privileges personal responsibility over responsibility for broader social groups, encouraging self-interest and selfishness, and reinforces the gap between the rich and the poor by redistributing wealth towards dominant groups.

Neoliberalism has the peculiarity of not only being a social-economic model, but rather it is founded on a collective ideological construction. Neoliberalism has taken on the task of convincing people to stay aligned with ideologies, values, forms of government, and policies that generate great gaps, suffering, and deprivation. Within the neoliberal system individuals are persuaded to lead a solitary lifestyle, the aspiration is to live a good life that capitalism proposes (Giroux, 2018).

Then, the discussion that has taken place over the last decades has focused on questioning the idea that development goes hand in hand with economic growth. The question is made towards a system that has been perpetuated since the end of the Second World War, and that has developed a hegemony in different areas of society: the idea of this system is that international prosperity and global human well-being can be achieved through global trade and industry (Hopwood et al., 2005).

In 1968, the so-called Club of Rome was founded, which brought together a group of people, scientists, and politicians, interested in improving the future of the world

in the long term, and in an interdisciplinary way. This association entrusted the Massachusetts Institute of Technology with the preparation of a report that would give an account of the limits of the development and growth model that characterised global society. This report, called *The limits of growth*, whose preparation was overseen by Donella Meadows, has served as an unavoidable reference for the environmental movement that since that moment began to spread. The importance of this report lies in its criticism of development and the ideal of perpetual growth that characterised the economic policies of different countries: it proposes a change to stop seeing the objective as the economy or the resources, to think about the situation from a focus on people and basic needs (Gudynas, 2011a).

According to Foladori and Tomassino (2000) from the beginning of the decade of the seventies of the 20th century, different positions could already be visualised in the face of environmental problems that were already evident. In the first place, they mention that the Club of Rome report represented a strong position in the discussion, since it argued that the growth rate that until then had been sustained in economic and political models around the world, would lead to an ecological and human catastrophe, mainly due to the scarcity of natural resources. On the other hand, there were those who held a more optimistic view of the situation, since they defended the inexhaustible resources of nature and the efficiency with which market mechanisms could regulate the distribution and regulation of these resources.

By the end of the 1970s, although there were different positions regarding the urgency, the causes or the possible solutions to the environmental and social crisis, there had appeared a vision that the conservation of nature required rethinking development strategies, and that environmental problems could not be solved from the ecology plane, but the social processes where the environment was threatened had to be analysed in depth (Gudynas, 2010). The environmental-social problem was taking on more and more force, until at the beginning of the 80s different multilateral organisations began to act on the matter.

In 1983, the United Nations created the World Commission on Environment and Development, the WCED, chaired by Gro Harlem Brundtland. This Commission aimed to suggest ideas and options to ensure that the world population can solve different problems in the face of a great environmental deterioration as well as reach a consensus with the participants on the need to change growth, meeting essential needs, considering the environment and decision-making in the economic context (WCED, 1987). Gro Harlem Brundtland, who was the Prime Minister of Norway at that time, has issued different reports that show the importance of evaluating the actions of governments based on three approaches: economic, environmental, and social (Calvento, 2007).

Hence the Brundtland report, which originally had the title *Our common future*, and which was published in 1987. This report is one of the initiatives that have marked a starting point for a global approach to sustainability issues, it reflects an interest of different multilateral or multinational organisations in the subject. The Brundtland report addressed "... the possibility of a new era of economic growth that must be based on policies that sustain and expand the environmental resource base; and we believe that this growth is absolutely essential to alleviate the great poverty that continues to be accentuated in much of the developing world..." (WCED, 1987, p. 22).

For Gudynas (2011a), this vision was strongly marked by political components, since being a document prepared by the United Nations, there was a strong vigilance in the writing or correction of the language, and more than direct denunciations there were insinuations. This document also reflects a conciliation between very different positions, so it does not reflect a strong position regarding the problem addressed.

In any event, through the report the Commission managed to disseminate widely the concept of sustainable development. The term began to be used in different contexts, such as advertising, forums, events, schools, universities, demonstrations, etc., and to this day, it has been used in different contexts such as 'sustainable exports', 'social sustainability', etc. (Gudynas, 2011a). At present, the term is widely used, and on many occasions, it is part of business campaigns to reflect a position of care for the environment, which seems to be a requirement today. However, this does not mean that there is an understanding of the depth of the problem and not even that the service or product that is marketed with this flag can avoid compromising the environment.

For Gadotti (2002), the terms 'development' and 'sustainable' are irreconcilable, and not irreconcilable from the point of view of their meaning, but irreconcilable in the context of capitalist globalisation governed by the idea of profit. That is to say, the current world economic model focuses development on economic gain, a constant search is proposed to expand, to increase sales, to increase profits, for a more efficient use of resources to lower prices, but then implies an increasing growth. But then what do you want to hold? Rather it seems that what is sustained is an economic system full of inequalities and injustices that, in the name of money, forgets the needs and humanity of people.

Sauvé et al. (2008) carried out an analysis of different international documents related to education, environment, and society, mainly recognising the importance of the United Nations Organization (UN) in promoting responsible global development. Among the findings three axes stand out: first, the environment is approached as a problem of resources, that is, the urgency of the environmental crisis is approached from the perspective that the resources that the human being obtains from the

environment are limited, they are running out and must be taken care of. The second axis is related to the developmental vision of sustainability: the agenda embodied in the different documents identifies the root of the problem in inequality and poverty, and proposes a total solution based on development and economic growth.

Finally, the third axis described by Sauvé et al. (2008) refers to the vision of education and the role it plays in the dissemination of sustainable development. In addition to the two axes described above, the concept of education in the documents analysed by Sauvé et al. has a scope limited to the dissemination of the developmentalist discourse: education is at the service of managing environmental resources, solving problems without delving into the causes, or simply engaged in the promotion of sustainable development. In some cases, the educational plans involved in these documents even seek to provide prescriptions on how to act in the environment, reducing the problems with resource management.

Sustainable development is the legacy of a broad discussion that originated in the second half of the 20th century, which stems from the need to rethink the social organisation that has brought us to the brink of an ecological crisis. The force of questioning has been decimated in the face of a political organisation that resists a fundamental transformation. Different social organisations participate in these discussions, among them HEIs, which, faced with the growing pressure to get involved in sustainability issues, have put the discourse into practice in different ways. In the next section we will touch on some important points to consider when positioning an HEI on this topic.

Considerations for a strategy

At present, we can observe a widespread use of the term 'sustainability', sometimes as a noun, sometimes as an adjective, accompanied by the word 'development' or accompanying an endless number of nouns, such as 'sustainable growth', 'sustainable programme', 'sustainable economy', 'sustainable technology', 'sustainable philosophy', etc. There is no doubt that the use of the term has spread in recent decades and has positioned itself before different audiences that use it in one way or another. And in the face of the environmental and social crisis that characterises our reality, it is increasingly difficult to ignore the issue.

The origin of the spread of the term highlights the questioning of the development models that have brought the planet to a critical situation. What sustainability or sustainable development already raises since the Brundtland report is the environmental impact of conventional economies on crises, and questions the contemporary idea that development implies perpetual growth (Gudynas, 2011c).

From the conceptualisation of the term 'sustainable development' in the report the concept has been expanding, and today, as Gudynas mentions, it is a polysemic category, since the term covers different meanings and different expressions in practice. The term has given rise to different perspectives, although sometimes contrary, but whose starting point is the consideration that the environment is in crisis, and it is necessary to act in some way in the face of this crisis.

Within the different currents and perspectives related to sustainable development, there is a questioning about the role of the used noun 'development'. This same concept of development is extremely vague, and lends itself to different interpretations and definitions, which in turn have evolved over time (Foladori & Tomassino, 2000). For some authors there is a contradiction between the concepts of sustainability and development, since development, seen from the hegemonic ideology, implies growth. Development is often considered as something linear, which must be increasing, and when defining this growth, it implies the increasing exploitation of nature (Boff, 2013). The term has emerged from the industrialist/capitalist political economy, and, therefore, is also immersed in the same paradigm.

Gadotti (2002) raises the importance of considering the context of formulation of the term 'sustainable development' when using it, since the word 'development' has different implications. In the first place, development is linked to an ideal of progress inherited from European colonialism, an ideal that is accompanied by the concept of history, the economy, and society based on growth and expansionism. The term 'development' implies a restrictive vision of what well-being and happiness should be for all human beings, and mainly based on the idea of accumulation of material goods. Furthermore, development takes up a division of the world into developed and underdeveloped countries, according to which the less developed countries should aspire to growth comparable to that of the more advanced countries. Development always implies the use of more resources and the production of waste, which is invariably unsustainable (Hopwood, 2005).

Sustainable development, manifested in different initiatives, represents for Gudynas (2011c) a label already used interchangeably, to respond to the environmental crisis without thoroughly analysing the current situation or problem. Many campaigns against climate change have been presented, or even an impressive number of more specific programmes such as garbage recycling or the use of alternative energy sources, however, the economic component is not neglected in these projects, campaigns and projects often carry economic profitability interests behind. Gudynas qualifies these initiatives as a kind of ecological repair on the part of capitalism. Meira (2015) mentions in this regard that environmental campaigns often ignore the large number of cultural stimuli through marketing, advertising, and the promotion of consumer lifestyles in the media and in social networks that push unsustainable lifestyles.

According to Gonzalez-Gaudiano et al. (2015) the problem lies in the lack of an understanding of the implications of talking about sustainability. HEIs carry out programmes or projects related to sustainability but do not alter their present structure. Sustainability comes up against what is known as the glass ceiling: just as gender equality policies come up against patriarchal structures at a certain point, sustainability comes up against structures linked to developmentalist or mercantilist visions.

Sustainability, however, does not focus its attention solely on man's damage to the environment, but rather addresses the problem from three perspectives that must be integrated: social justice, ecological compatibility, and economic viability (Reichmann, 1995), as we cannot conceive that the so-called underdeveloped or developing countries reach the level of industrialisation of the developed countries, simply, the world's resources would not be enough.

For Foladori and Tomassino (2000), there are three axes regarding visions about sustainability. In the first place, there is a vision in which sustainability responds to an ecological problem, reflected in a crisis of natural elements; on the other hand, there is the axis that considers sustainability to be ecological and social, but social is only conceived as a means to achieve ecological sustainability. Finally, the third vision considers that sustainability must be social and ecological, since the problem is found in both areas and a response to it must lead to a form of 'society-nature' co-evolution. An example would be the problem of a group of poor peasants who use burning and slashing in their agricultural methods. The first axis would seek to solve the environmental problem, perhaps with the prohibition of burning or slashing. In the second axis, the responses to the problem would be related to the decrease in degradation in the area: green technologies, increased productivity in relation to the use of resources, change towards the use of renewable resources, etc. The third axis, on the contrary, would provide a view of the problem from the social point of view, analysing the root and considering the environment not as the abiotic environment, but as part of a system in which it is necessary for everything to be conserved.

Based on this analysis, Foladori and Tomassino (2000) classify the official position of sustainable development in the second axis, emphasising the lack of a social analysis of environmental problems. Many of the programmes or initiatives derived from this type of stance already represent an unsustainable approach and are based on the preservation of capitalist social relations. That is, the interest in the social part of sustainability depends on the impact on ecological sustainability.

Through four decades of sustainability management in HEIs and in environmental public policies, various notions have gravitated around it, e.g., very general conceptualisations such as Atkisson's (2013), which considers sustainability in terms of

society's capabilities to build a world that works for everyone. Other conceptualisations refer to sustainability as a constitutive element of a system, organised and articulated among its components, to preserve its balance and internal organisation so that it remains over time. The task attributed to humanity, as the human being is the species with the highest incidence. From this perspective, as Karatzolou (2013) and Alba (2017) point out, such an organisation refers to the social, economic, and ecological dimensions, as well as the relationship between them. Thus, the notions that make up the conceptual spectrum of sustainability place an emphasis on one of these three dimensions.

However, it is worth noting what Alba points out in relation to the less discussed and visible dimension in sustainability policies: the social one, "the collective attention towards ecological issues is predetermined by the situation of mixture of society and nature in which ecological threats are always threats to the social system" (2017, p. 17). In other words, it is the way in which societies understand, relate to, care for, and make use of nature that determines the socio-ecosystem balance, therefore, the social dimension in sustainability becomes relevant in the understanding and implementation of sustainable actions.

For Gadotti (2002), this dilemma is expressed in two possible paths in search of the meaning of human existence and its relationship with the planet: the technozoic and the ecozoic. The technozoic is the way in which it is considered that technology can solve environmental problems and that with the help of technology man can continue with a polluting and consumerist lifestyle. On the other hand, the ecozoic is the path that seeks to generate a healthy relationship between human beings and the planet, recognising it as part of the natural world and characterising ecological problems. An appropriate pedagogy for the second path would have to be directed towards the thinking of complexity, seeking to deconstruct disciplinary and simplifying thinking. Gaudiano (2000) takes up the notion of complexity when referring to environmental education, complexity in the face of 'enlightenment essentialism', which fragments knowledge into disciplines and which faces problems from limited perspectives. Even discussing interdisciplinarity is insufficient, since an interdisciplinary approach implies that the disciplines are separate, and that each one contributes from its front. The complexity suggests a more comprehensive approach to the problems, and a deeper one compared to initiatives focused on solving only the ecological question.

Complexity implies analysing the problem from a dislocation (Gaudiano, 2000), taking thought beyond anthropocentric perspectives that perceive nature as a series of stacked resources for human consumption. The traditional definition of sustainable development mentions that it is necessary to create a system in which the needs of the population are met, without compromising the well-being or fulfillment of future generations (WCED, 1987). Speaking of future generations, the question is:

are we referring only to future human generations? Or are we also referring to future generations of other living beings? Or beyond this, should we think that everything that forms part of nature but is not alive could be used in one way or another for the benefit of living beings and their survival? On the contrary, the vision of sustainability must detach from the anthropocentric vision and focus on the conservation of the environment for its own value, not based on the needs it can fulfil.

Some visions of sustainability are limited to responding to environmental problems, with green technologies, environmental restrictions, taxes on unsustainable practices, etc., to give space to sustainability issues, but without analysing the problem more deeply, without addressing a complexity approach. And perhaps this way of facing the gravity of the situation is the only one allowed by the economic and political system in power, this system that qualifies the environment as a resource and that seeks economic growth in all areas.

Authors such as Hirvilammi and Helne (2014, p. 2161) point out that public sustainability policies are needed aimed at "promoting human well-being, and at the same time, reducing human pressure on the biosphere" and the climate system. This implies the coordinated management of the social, economic, and ecological dimensions. Then we speak of a social change in which nature acquires vital value, for which the social dimension must be reconsidered in ethical terms of responsibility for nature (Sauvé, 2014). Well, they are precisely the ideologies, interests, values, and knowledge, mainly characteristics of the social dimension of sustainability, which determines the society-nature relationship (Alba, 2017).

Such a reconceptualisation, therefore, demands educational processes that go beyond visions focused only on ecological aspects, to arrive at sustainability from complex approaches that involve multiple visions of sustainability: mainly ecological, economic, social, ethical, multicultural, based on the recognition that the socioenvironmental crisis we are experiencing and demands education processes for sustainability that foster values, knowledge and responsible eco-citizen behaviours that respond to such a crisis (Sauvé, 2006, 2014).

According to Gadotti (2002), the key is to speak of sustainable society, beyond sustainable development, in which life and human survival are valued over any other economic valuation of natural or human resources. In this sense, Boff (2013) appeals to the need for social justice, which is combined with ecological justice. The current economic model qualifies people and other living beings on the planet as resources and qualifies the other components of our ecosystem as natural resources, therefore, talking about social justice suggests a new valuation of people as human beings and a reassessment of the environment by its very nature, not based on its usefulness. However, proposing this paradigm shift represents, from the point of view of the economic system, a threat to its structure, a valorisation that breaks with the scheme

of our contemporary societies. Perhaps for this reason most of the initiatives remain superficial and attack the problem from very basic or partial questions.

Undoubtedly, although sustainable development is limited by the current economic or political system, it represents the beginning of a struggle, as mentioned by Gadotti (2002), it is a mobilising idea in the passage of the millennium. The agendas of the 21st century are incorporating the issue from different perspectives. However, it is gaining strength and is claiming new spaces with the passage of time. We rescue this idea because the need for sustainability to be a reflection seems to be extremely relevant, but which at the same time must imply an action in the face of injustice and in the face of the urgent problem that is the deterioration of the environment that surrounds us.

In addition, for the establishment of a sustainability strategy in HEIs, it is related to the institutionalisation of the subject. When a university decides to get involved with the subject and develop a plan for its incorporation in different university areas, it is necessary to design a strategy. This strategy must consider different dimensions of work and strategies to relate to the different university areas. Sauvé et al. (2008) mentions that HEIs should not impose certain ways of thinking or doing, uncritically, since in this way institutionalisation generates a culturally blind isomorphism. In addition, a sustainability mainstreaming plan must offer concrete strategies and means of implementation.

For Gudynas (2011c), in many cases the problem has appealed to strong social and environmental regulations, in protection of health, quality of life or the environment, however, the lack of monitoring and effective application of sanctions does not allow initiatives to flourish. In Gudynas' view, it is necessary to face the initiatives from different angles, not only from the perspective of legislation or regulation, but also from the economy, from the study of human behaviour, etc.

In addition to the points described above, Stein (2019) develops some considerations regarding coloniality in HEIs. Coloniality in education is manifested in the reproduction of instrumentalist visions and anthropocentric imaginaries of justice and responsibility. Even though it is known that modern knowledge (mainly in the form of technology) is the cause of the environmental crisis, this knowledge is framed as the solution. Instrumentalist visions are characterised by maintaining an unequal distribution of power and justice, rejecting marginalised communities guiding their own visions of social development or transformation, and reproducing the hierarchies of knowledge that exalt Western science and technology. As a result of this pattern, the value of other knowledge, traditions, social capacities, and ecologies is minimised.

Findings

Sustainability and sustainable development have been developed in a limited political framework that seeks to reproduce the present relations of power and knowledge. The questioning suggested by the sustainability approach must go beyond these limitations, to propose a fundamental transformation.

In this sense, education acquires a transforming role characterised by the following considerations:

- 1. There must be a clear position regarding sustainability or sustainable development, including a position on the concept of development and its implications.
- 2. Sustainability must address comprehensively the environmental, economic, and social components of each problem.
- 3. Far from technology-based solutions, problems must find an answer in an analysis based on complexity.
- 4. HEIs must be aware of the process of institutionalising sustainability in their structures and define incorporation and monitoring strategies.
- 5. Sustainability needs to trigger a reflection on the processes of reproduction and colonialism within HEIs, especially in non-European contexts, where there are different perspectives from those of the West.

Conclusion

We consider it of great importance to take some considerations in the definition of sustainability in an institution of higher education: it is necessary to propose a critical look at the problems, deconstructing developmental visions; beyond anthropocentrism, sustainability seeks to raise the valorisation of the environment and all living beings for their own existence. It is necessary to approach the problem from the side of complexity, avoiding essentialist views. Although difficult, any sustainability process requires a deep reflection on its objectives, positions, and goals in order to defend itself and counterattack the prevailing socio-economic structure that will oppose resistance. Finally, sustainability must require urgent action, commensurate with the speed, and acceleration with which the environment is degrading.

Higher education institutions must take a clear and concise stance on sustainability. This vision must consider economic, environmental, but above all, social aspects, considering the limitations that this position may find in its internal and external structures: the work of the institutions lies precisely in triggering a change beyond them. In addition, HEIs must take as a starting point the worldviews of their

immediate environment, and not limit themselves to the discourses and strategies formulated from the perspective of Western realities.

The current environmental crisis highlights the finitude of the resources in our environment and the need for their redistribution in an equitable manner. Higher education acquires an important role and, within it, education for business or administration receives the task of imagining, proposing, and bringing to life transformative and fair economic processes.

References

- Alba, H.D. (2017). Hacia una fundamentación de la sostenibilidad en la educación superior. *Revista Iberoamericana de Educación*, 73, 15–34.
- Atkisson, A. (2013). Sustainability is for Everyone. United Kingdom: ISIS Academy.
- Boff, L. (2013). La sostenibilidad. Qué es y qué no es. España: Salterrae.
- Calvento, A. (2007). El concepto moderno de sustentabilidad. *Socioecología y desarrollo sustentable*, 100(2), 1–7. Retrieved from: http://sustentabilidad.uai.edu.ar/pdf/sde/uais-sds-100–002%20-%20sustentabilidad.pdf
- Foladori, G., y Tommasino, H. (2000). El concepto de desarrollo sustentable treinta años después. *Desenvolvimento e Meio Ambiente*, (1), 41–56.
- Gadotti, M. (2002). Pedagogía de la Tierra. D.F. México: Siglo veintiuno editores.
- Gonzalez-Gaudiano, E. (2000). Complejidad en Educacion Ambiental. *Topicos en Educacion Ambiental*, 2. 21–32.
- González-Gaudiano, E. et al. (2015). Sustentabilidad y Universidad: retos, ritos y posibles rutas. *Revista de la Educación Superior*, (3) 175, 69–93.
- Giroux, H. (2018). La guerra del neoliberalismo contra la educación superior. Barcelona: Herder.
- Gudynas, E. (2010c). Desarrollo sostenible: una guía básica de conceptos y tendencias hacia otra economía. *Otra Economía (Revista Latinoamericana de Economía Social y Solidaria*), 4(6), 43–66. Retrieved from: http://gudynas.com/publicaciones/GudynasDesaSostOtraEconomia10.pdf
- Gudynas, E. (2011a). Ambiente, sustentabilidad y desarrollo: una revisión de los encuentros y desencuentros. In: J. Reyes, E. y Castro (Eds.), *Contornos educativos de la sustentabilidad* (pp. 109–144). Guadalajara, México: Universidad de Guadalajara.
- Gudynas, E. (2011c). Desarrollo y sustentabilidad ambiental: Diversidad de posturas, tensiones persistentes. In: A. Matarán, F. y López (Eds.), *La Tierra nos es muda: diálogos entre el desarrollo sostenible y el postdesarrollo* (pp. 69–96). Granada, España: Universidad de Granada.
- Hirvilammi, T., y Helne, T. (2014). Changing Paradigms: A Sketch for Sustainable Wellbeing and Ecosocial Policy. *Sustainability*, 6(4), 2160–2175.

- Hopwood, B. et al. (2005). Sustainable Development: Mapping Different Approaches. *Sust. Dev.*, 13, 38–52 Published online in Wiley InterScience. Retrieved from: www. interscience.wiley.com. DOI: 10.1002/sd.244
- Karatzogou, B. (2013). An in-depth literature review of the evolving roles and contributions of universities to Education for Sustainable Development. *Journal of Cleaner Production*, 49, 44–53.
- Meira, P. (2015). De los Objetivos de Desarrollo del Milenio a los Objetivos para el Desarrollo Sostenible: el rol socialmente controvertido de la educación ambiental. *Educación social: Revista de intervención socioeducativa*, 58–73.
- Riechmann, J. (1995). Desarrollo sostenible: la lucha por la interpretación. En Naredo, JM. *De la economía a la ecología* (1st ed.), 1–20.
- Sauvé, L. (2006). La educación ambiental y la globalización: desafíos curriculares y pedagógicos. *Revista iberoamericana de Educación*, 41(2006), 83–101.
- Sauvé L. et al. (2008). Tres décadas de normatividad internacional para la educación ambiental: una cítica hermenéutica del discurso de Naciones Unidas. From Gaudiano, E. Educación, medio ambiente y sustentabilidad. Siglo XXI Editores.
- Sauvé, L. (2014). Educación ambiental y ecociudadanía. Dimensiones clave de un proyecto político-pedagógico. *Revista Científica*, 18(1), 12–23.
- Stein, S. (2019). The ethical and ecological limits of sustainability: A decolonial approach to climate change in higher education. *Australian Journal of Environmental Education*. Retrieved from: https://doi.org/10.1017/aee.2019.17
- World Commission on Environment and Development (1987). *Our common future*. Oxford: Oxford University Press.

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