

**DOSSIER***Internationalization of educational policies within the framework of human rights***The University and its Responsibility for the Environmental Future and the Human Rights of the New Generations***La universidad y su responsabilidad con el futuro ambiental y los derechos humanos de las nuevas generaciones**A Universidade e sua Responsabilidade com o Futuro Ambiental e os Direitos Humanos das Novas Gerações***Omar Cabrales Salazar<sup>a</sup>**

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**ABSTRACT**

The current environmental crisis calls upon all institutions and social forces to seek strategies to mitigate the damage that human activity inflicts on ecosystems around the planet. Environmental care and the protection of the environment have been enshrined in the San Salvador Protocol as one of the Human Rights and one of the growing responsibilities of universities, as the climate crisis has reached points of no return. The research that gave rise to this article aimed to explore the training interests and the most serious current problems that university education should focus on, from the perspective of first-semester students of social and human sciences from four Colombian universities. A quantitative, descriptive-explanatory methodological approach was used, from which a survey instrument was applied to a convenience sample. It was concluded that university institutions should emphasize the implementation of curricular spaces that promote teaching and learning about the environmental crisis, sustainable development, and the mitigation and adaptation to climate change, as well as the respect for Human Rights as one of their priorities.

**Keywords:** Environmental Education. Human Rights. Sustainability. Sustainable Development.

**RESUMEN**

La actual crisis ambiental convoca a todas las instituciones y fuerzas sociales a buscar estrategias que mitiguen los daños que la actividad humana ejerce en los ecosistemas de todo el planeta. El cuidado ambiental y la protección del medio ambiente ha sido consagrado en el Protocolo de San Salvador como uno de los Derechos Humanos y una de las crecientes responsabilidades de las universidades, pues la crisis climática ha llegado a situaciones de no retorno. La investigación que le da origen al presente artículo tuvo como objetivo indagar por los intereses de formación y las más graves problemáticas actuales en las que deberá enfocarse la

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educación universitaria, desde la perspectiva de estudiantes universitarios de primeros semestres de ciencias sociales y humanas de 4 universidades colombianas. Utilizó una metodología de enfoque cuantitativo, de tipo descriptivo-explicativo, a partir de la cual se aplicó un instrumento de encuesta a una muestra por conveniencia. Se concluyó que las instituciones universitarias deben enfatizar en la implementación de espacios curriculares donde se promueva la enseñanza y aprendizaje sobre la crisis ambiental, el desarrollo sostenible y la mitigación y adaptación al cambio climático, así mismo, el respeto por los DDHH como una de sus prioridades.

**Palabras clave:** Educación Ambiental. Derechos Humanos. Sostenibilidad. Desarrollo Sostenible.

## RESUMO

A atual crise ambiental apela a todas as instituições e forças sociais para que procurem estratégias que mitiguem os danos que a atividade humana exerce sobre os ecossistemas de todo o planeta. O cuidado ambiental e a proteção do meio ambiente foram consagrados no Protocolo de San Salvador como um dos Direitos Humanos e uma das responsabilidades crescentes das universidades, uma vez que a crise climática atingiu situações sem volta. A pesquisa que dá origem a este artigo teve como objetivo investigar os interesses formativos e os problemas atuais mais graves sobre os quais a educação universitária deve se concentrar, a partir da perspectiva de estudantes universitários dos primeiros semestres de ciências sociais e humanas de 4 universidades. Utilizou-se uma metodologia de abordagem quantitativa, descritiva-explicativa, a partir da qual foi aplicado um instrumento de pesquisa a uma amostra de conveniência. Concluiu-se que as instituições universitárias devem enfatizar a implementação de espaços curriculares onde sejam promovidos o ensino e a aprendizagem sobre a crise ambiental, o desenvolvimento sustentável e a mitigação e adaptação às alterações climáticas, bem como o respeito pelos direitos humanos como uma das suas prioridades.

**Palavras chave:** Educação Ambiental. Direitos Humanos. Sustentabilidade. Desenvolvimento Sustentável.

## Introduction

Universities have now become global organizations with the responsibility of implementing curricula and research that incorporate environmental education as a central axis for environmental care and the protection of Human Rights. Within the framework of university environmental responsibility (Cabrales Salazar; Márquez Vargas; Ramírez, 2020) and the protection of Human Rights, higher education institutions are well suited not only to deploy the necessary mechanisms to raise environmental awareness and research climate change and its consequences, but also to implement programs that impact their stakeholders and become leading and autonomous institutions in the protection of Human Rights.

Moreover, according to UNESCO (2019), it is necessary to implement transdisciplinarity in the teaching of sustainable development, integrating it into other subjects and individually, as the broad range of topics it covers requires a foundation in the philosophical principles of environmental ethics, Human Rights, bioethics, Social Sciences, and Humanities. Additionally, to implement innovative solutions for the provision of clean energy and the optimization of resources, it is also necessary to integrate the curricula of exact sciences, economics, and legal sciences. In the words of Nobel Prize-winning physicist Serge Haroche: "Problems such as global warming and climate change can be solved through joint action that requires applied basic science and, of course, funding" (González Gomez, 2023, p. 1). Matsuo y Silva (2021) and Jacobi (2014) associate a synergistic approach to

socio-environmental disasters that require an integrated perspective in the process of knowledge construction, through the appreciation of different forms of knowledge and the disruption of structures that generated hierarchy and compartmentalization of knowledge.

The neoliberal economic model and globalization processes have created needs within the framework of consumer society that are unsustainable in the medium term. This economic system is anchored in an expansive industrial process backed by financial capital (Piketty, 2014; Bauman, 2009) and the extractive practices characteristic of neoliberalism. It is necessary that universities and the fields of social sciences, economics, art, philosophy, and legal sciences promote economic models more focused on the conservation of ecosystems, such as the Bioeconomy and the Circular Economy, and the promotion of Economic, Social, Cultural, and Environmental Rights (ESCR), which, according to the ESCR-Net (2023), are human rights related to the basic social and economic conditions necessary for a life of dignity and freedom, addressing fundamental issues such as work, social security, health, education, food, water, housing, an adequate environment, and culture.

To achieve these goals, universities must teach various proposals and models of human-scale development (Max-Neef, 1986) that promote a more frugal lifestyle, basing development on the reduction of unnecessary consumption and the satisfaction of truly human needs (Cabrales Salazar; Bermúdez, 2022). In this sense, Villaverde (2009, p. 198) proposes the need for Environmental Education as a means to rethink the relationships between students and the biosphere, while at the same time becoming “an instrument of social transformation and empowerment of the weakest, all with the goal of achieving more harmonious and equitable societies”.

In this article<sup>1</sup>, we first structure the theoretical framework on environmental problems and Economic, Social, Cultural and Environmental Rights, in the university context of Colombia. Then, we briefly explain the methodological component of the research; to finally analyze the results of the surveys whose objective was to visualize the new academic interests of digital citizen students, through a documentary study and fieldwork in 4 Colombian universities.

## **Theoretical framework**

### ***Environmental Education and Human Rights***

The dimension of environmental education within universities is connected to the guidelines of international organizations such as UNESCO, as well as national public policies on environmental issues, sustainability, and Human Rights. The urgency of climate change has led to the adoption of various pedagogical strategies in the context of environmental education in universities. These strategies address issues related to waste management, greenhouse gas emissions, contamination of water sources, inefficient exploitation of renewable and non-renewable resources, biodiversity extinction, and deforestation of protected areas. These aspects stem from initiatives by higher

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education institutions, as well as from public bodies and private organizations that promote the care of the natural environment.

These guidelines also inherently lead to the need for education in Human Rights, particularly for digital citizen students, and specifically in Economic, Social, Cultural, and Environmental Rights (ESCR), which are enshrined as Fundamental Rights in the Protocol of San Salvador, (OEA, 1998, Art. 11): “1. Everyone has the right to live in a healthy environment and to have access to basic public services. 2. The States Parties shall promote the protection, preservation, and improvement of the environment”. In the same vein, we revisit the legal foundation provided by Díaz (2008), who addresses the relationship between the Rule of Law and democracy as historical processes of legitimation open to continuous and critical review. The author highlights that the culture of the Rule of Law is grounded in the philosophy of the Enlightenment and critical rationalism, seeking to legalize the value system that characterizes democratic legitimacy. Therefore, Human Rights are considered the *raison d'être* of the Rule of Law, and their effective protection and realization constitute the foundation of this political-legal model.

Regarding the role of universities and environmental care, these institutions are not isolated from global activities, national and international environmental norms, and the respect for Economic, Social, Cultural, and Environmental Rights. These have been shaped by various instances that have defined the guidelines for 21st-century environmental education. From UNESCO's perspective (2019), the role of Higher Education Institutions (HEIs) should focus on five areas of development: i. Sustainability Learning and Teaching; ii. Environmental Sustainability Research; iii. Institutional Governance; iv. Social Leadership; and v. Sustainable University.

Additionally, the 2030 Agenda (ONU, 2015a) has become a unifying goal that has brought together the efforts of various institutions, with universities playing a significant role. This agenda represents new opportunities for offering academic programs, conducting research projects, engaging in social work, and obtaining patents. The global environmental agenda has broadened the scope of action for higher education institutions, not only with their students, alumni, and faculty but also with communities, NGOs, governmental organizations, and other universities, all working within a common agenda that extends beyond the traditional functions of teaching, research, and social outreach.

### ***The Concept of Environment in the Market Economy***

In the context of the aforementioned studies, the environment is interpreted as a system or a set of biological and physico-chemical variables necessary for living organisms, including factors such as the quantity or quality of oxygen in the atmosphere, the presence or absence of water, the availability of healthy food, and the presence of species and genetic material. Specifically; “the environment is that in which living beings are efficiently integrated and interact, including humans and other abiotic components” (Carson, 1962, p.48). Within these parameters, the prevailing market economy mistakenly assumes that natural resources are indispensable in its commercial dynamics, while simultaneously recognizing that they are not inexhaustible, contrary to what

was believed for much of the 20th century. Consequently, the relationship between society and universities is evolving towards a set of new assumptions and environmental management actions that promote the efficient use — or even the non-use — of natural resources, under “perspectives of adaptation, mitigation, circular economy, bioeconomy, and regenerative economy, in response to the environmental impact of extractive and industrial activities” (CEPAL, 2011, p. 84).

Concerning humans, what is now recognized as territory, with its associated ecosystems and species, serves as a means of survival for present communities, but also as an essential resource for the survival of future generations. From an academic perspective, the environment has come to be understood as a concept that spans from the relationships established within a specific organization to the global ecological system (Berdugo y Montaña, 2016); niches that also encompass relationships expressed through culture, ideology, and economy. Based on these guidelines, the ONU (2015b) emphasizes that the concept of environment is closely linked to development, a relationship that facilitates the understanding of environmental problems and their intersection with sustainable development.

Under these cultural parameters within the market economy, Fernandes y Paula (2020) identifies a process of universalization of economic logic, which assigns the market the institutional responsibility of controlling and overcoming not only environmental degradation but also economic crises and their own spread. Similarly, Piketty (2014) connects the concentration of wealth and social exclusion with neoliberal policies and the global economy established in most countries worldwide, factors that significantly contribute to environmental degradation. In this context, concerns arise about the impact on natural settings, where humans are often blamed for ecocide and held as the primary culprits, driven by selfish behaviors shaped by the economic orientations of neoliberalism (Harvey, 2008).

Hence, within the market economy, the need to develop a vision of environmental education has become a new imprint on university curricula and degree programs. Boff (2008, p. 25) warns on this point: “We must change our minds, our hearts, our mode of production and consumption; the solution for the Earth will result from a coalition of forces around an integral ecological awareness”. Consequently, one of the survey questions explored the areas of knowledge on which universities should focus in the post-pandemic context and the current climate change scenario, along with the growing number of international conflicts.

The student population was also asked about the most serious global issues for which universities should prepare students, such as the increasing phenomenon of migration, inequality in underdeveloped countries, respect for Human Rights, the preservation of peace and international security, the promotion of global economic and social development, the promotion of universal primary and secondary education, environmental sustainability, combating climate change, and renewable energy sources, among others.

It cannot be denied that since the establishment of extractive activities characteristic of the Second Industrial Revolution in the early 20th century, the urgency of not extracting resources from nature in a violent and indiscriminate manner has been proclaimed. In the vision of Economic, Social, Cultural, and Environmental Rights (ESCR), the relationship between humans and nature must promote mutual health as a fundamental right. Furthermore, states must ensure the progressive

implementation and effectiveness of these rights through appropriate policies. Thus, the human practice of transforming natural resources to produce consumer goods, which are then discarded and increasingly pollute water sources, could be seen as violating the right to a healthy environment.

### ***Human Rights Perspective and Environmental Care***

In correlation with the previously discussed ideas and in response to the dominant concept of progress in the West, which is often associated with development and higher levels of consumption, universities are beginning to question what growth and economic development truly means. In this context, Human Rights and the legal sciences face the challenge of discerning public policies that promote new paradigms of development, which include environmental care from a perspective that goes beyond anthropocentrism (Baudrillard, 1970; Cabrales Salazar, 2015).

In this sense, Human Rights transcend in a deeper way when reaching the Paris Agreement adopted within the framework of the UNFCCC in 2015 and to which 192 States are part; this fact imposes a new turning point in the narrative on the links between climate change and Human Rights by recognizing that:

Climate change is a common problem of humanity, and therefore, the parties, when taking measures to address it, should respect, promote and take into consideration their respective obligations with respect to Human Rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and persons in vulnerable situations and the right to development, as well as gender equality, women's empowerment and intergenerational equity (ONU, 2015c, p. 2).

From this perspective, the essential role of universities in promoting and defending Human Rights in the 21st century is emphasized, fostering values of equality, tolerance, and respect. Additionally, it highlights the university's key role in cultivating democratic values and the importance of understanding the interaction between Human Rights and academia (Baltodano, 2023).

Currently, there is an ongoing debate regarding the relationship between climate change and Human Rights. The importance of integrating Economic, Social, Cultural, and Environmental Rights (ESCR) and vulnerable groups exposed to climate change. Then, they are highlighted public policies on the care of the environment and the protection of these groups are highlighted, based on the principles of equality and non-discrimination, gender equity, and the protection of indigenous communities, Afro-descendants, migrants, children and people in vulnerable situations, among others. The relevance of United Nations Human Rights Council resolutions, which address the intersection between climate change and Human Rights, is also highlighted. In conclusion, the importance of incorporating a Human Rights perspective into the conception and implementation of public policies related to climate change is emphasized, as well as the need to protect vulnerable groups that may be particularly affected by its impacts.

Therefore, research conducted in universities suggests that within the framework of competitive global production schemes, the notion of progress based on economic growth and increased consumption gradually diminishes the protection of Human Rights and the possibility of



a dignified and harmonious lifestyle for the majority of the population. In other words, “a potential solution from the same paths of capitalism is not foreseeable” (Barkin, 1998, p. 45).

Consequently, the areas promoted within universities, such as environmental policy, environmental regulations, and institutional programs for environmental protection, can only reach their full effectiveness when they are incorporated into the new logic of Human Rights. This approach acknowledges that nature possesses intrinsic values, moving away from the traditionally exclusive human prerogative of assigning value to things — a concept classical philosophy refers to as instrumental value.

The new way of understanding the natural world causes a different way of thinking about animal and plant beings; or better, to relate to them, since at this axiological point it is understood that ecosystems and their species can become subjects of rights. In this sense, the Stockholm Declaration (UNEP, 1972, p. 5) specifies that “as part of their contribution to economic and social development, science and technology must be used to identify, avoid and combat the risks that threaten the environment”.

### ***Environmental Education for Sustainable Development***

In recent years, universities in Colombia, as well as those in other countries, have integrated environmental and sustainable development guidelines into their core missions, following the promotion of these themes by multilateral organizations after 2000. This shift reflects significant educational progress, as highlighted by Alonso-Gatell, Álvarez-Aguilar y Castillo-Elizondo (2016, p. 1): “Every professional activity must make significant contributions to environmental issues. Therefore, a socially responsible university education is essential”.

In addition to international guidelines, higher education institutions in Colombia have also been guided by the 2002 Public Policy on Environmental Education. This policy required additional efforts from universities, which inevitably led to some challenges in adapting to these directives. Callejas-Restrepo *et al.* (2018, p. 200) notes that “one of the major difficulties has been, in part, interdisciplinary work; another is achieving a perspective that sees the world environmentally, both from natural and social sciences, health, and engineering”.

Analysis of the environmental aspects within universities reveals that there are still areas of underperformance, particularly in responsible consumption, actions to compensate for ecological footprints, and sustainable mobility. However, higher education institutions must remain focused on their core mission. Cárdenas (2013, p. 10) emphasizes this by stating, “The university has the responsibility to train professionals who are prepared to perform their work in an environmentally correct way, and also to be an example for their social environment by conducting activities that generate the least environmental impact”.

Furthermore, “quality environmental education in the university cannot be achieved if it is not reinforced by proper management of environmental aspects. Similarly, environmental management based on sustainable development will not succeed without fostering the active participation of the entire university community” (Gómez y Botero, 2012, p. 9). Structural differences between higher

education institutions mean that the process of integrating environmental perspectives, despite originating from similar conceptual sources, yields different and varied outcomes.

Higher education institutions have made a long journey to establish their identity as guarantors of human environmental awareness. They are aware of their dual purpose: on one hand, to promote the training of scientists who, with their knowledge, have contributed to the consolidation of the productive system that has led to environmental degradation; on the other hand, to educate humanists capable of developing a new understanding of the relationship between humans and natural environments. For this reason, higher education institutions are called upon “to conduct a deep analysis of their curricula and adopt epistemological positions that include complexity, transversality, and integration, to respond to the real training needs of future professionals and the urgent demands of societies” Molano Niño; Herrera Romero, 2014, p. 201).

## Methodology

This research adopted a quantitative approach with a descriptive-explanatory design, based on the analysis of results obtained from a survey and an extensive document review. The information was collected through an instrument sent by email to faculty and first- and second-semester students in social sciences and humanities (cohorts 2022-2 and 2023-1) from four universities in Bogotá, Colombia. The objective was to collect data on the fields of knowledge and the main global issues that universities need to address in the training of future professionals in the post-pandemic period and the current context. These issues were based on categories established by the United Nations. A total of 2,054 completed questionnaires were received, of which 1,231 (43% of the universe) corresponded to student responses, which will be the focus of the analysis in this article.

The questionnaire was sent to email addresses of students from four universities in Bogotá: Universidad Militar Nueva Granada, Universidad La Gran Colombia, Universidad Católica, and Universidad Central. These institutions were selected based on convenience, as the members of the research team were employed there at the time of the survey. Additionally, a document review was conducted, including Institutional Educational Projects (PEI), study plans, faculty pedagogical plans, documents from the Ministry of Education, documents from the Ministry of Environment and Sustainable Development, and documents on environmental education from international institutions such as the UN, UNICEF, CEPAL, among others.

For the literature search, the following databases were used: Resh, Dice, In-Recs, Science Direct, LA Referencia, Dialnet, Redalyc, Scielo, Base, Redib, Biologybrowser, Jurn, Erih Plus, Latindex, Scopus, Teseo, and Google Scholar. To analyze the co-occurrence relationships by semantic link, the software BibExcel was used, and for the visualization of semantic communities, the program Gephi was utilized. The queries were related to terms such as: University of the future; post-pandemic education; future professions; digital citizens; environmental ethics; human rights; environmental education; environmental crisis; environmental degradation; planetary crisis; pollution; sustainable development; and human survival.



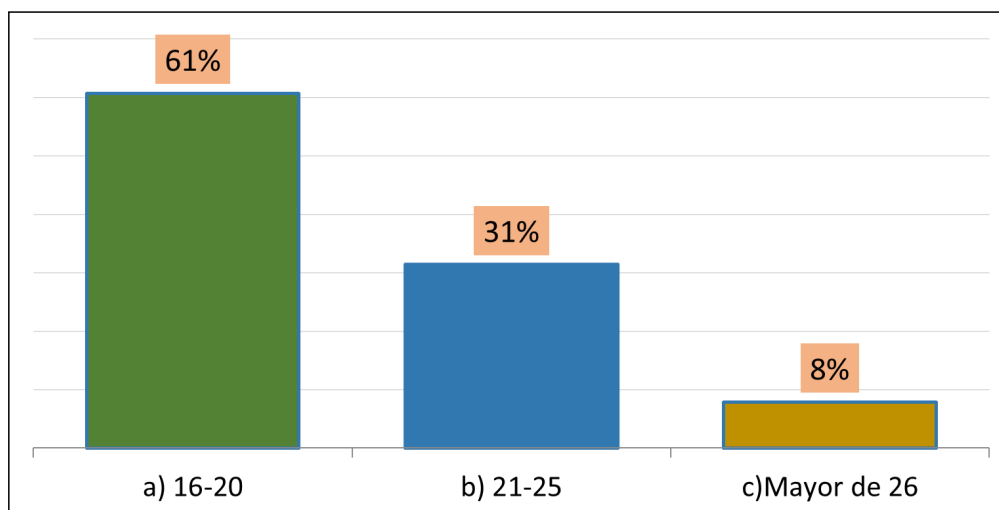
## Analysis and Results

The objective of this research was to explore the academic interests of digital native students in the post-pandemic context through a survey and analysis of institutional documents. The investigation involved students from the four aforementioned universities to identify the fields of knowledge in which professionals need to be trained. These fields were based on the classification provided by the Colombian Ministry of Education (MEN) for granting official academic program registrations in Colombia. Additionally, the study explored the most pressing global issues that universities should focus on and the hard and soft skills that students need in a global context.

Below is the analysis of the demographic questions and the survey questions presented to the students.

### Demographic Questions

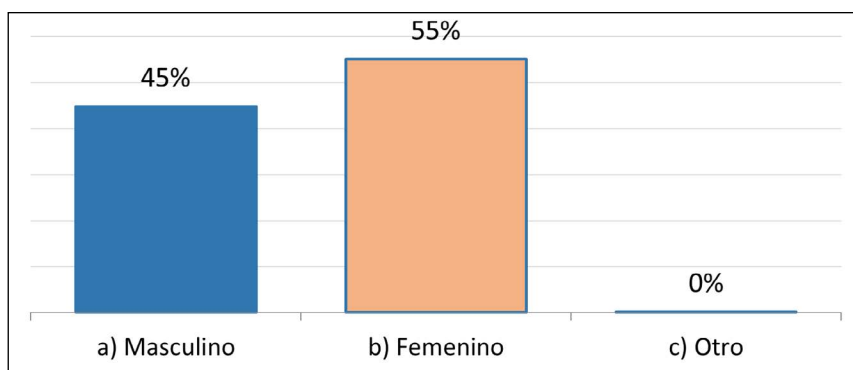
Figure 1: Students' age



Source: Own elaboration.

Analysis. Figure 1 shows that 61% of the students are between 16 and 20 years old, the youngest group in the sample, as they are in their first or second semester. This indicates that they were born in the 21st century and have been exposed to the initial consequences of climate change. It is also inferred that this age group belongs to the category of digital citizen, because they have had access to digital technology, data and smartphones from an early age. This characterization refers to a type of citizen who exercises their citizenship through digital media, carries out most of their activities through electronic means, is permanently connected to the Internet and communicates through instant messaging applications; in addition, they establish social and work relationships through social networks.

**Figure 2: Gender**

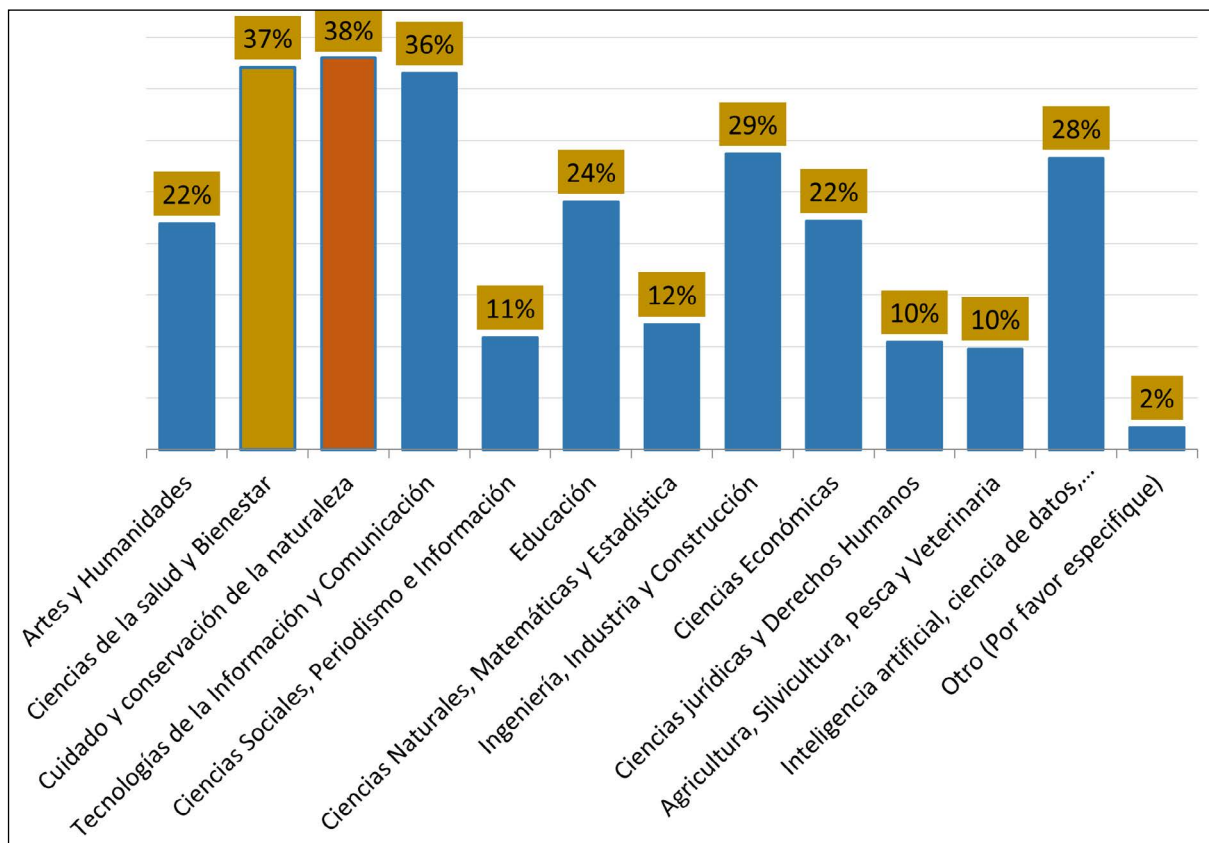


**Source:** Own elaboration.

Analysis. Figure 2 indicates that 55% of the students who responded to the survey are female, confirming the growing participation of women in universities over the past 10 years in Colombia, as confirmed by the MEN.

### **Questions Related to the Categories of Analysis**

**Figure 3:** After the pandemic and in the current context, on what areas should the University mainly focus to train professionals?

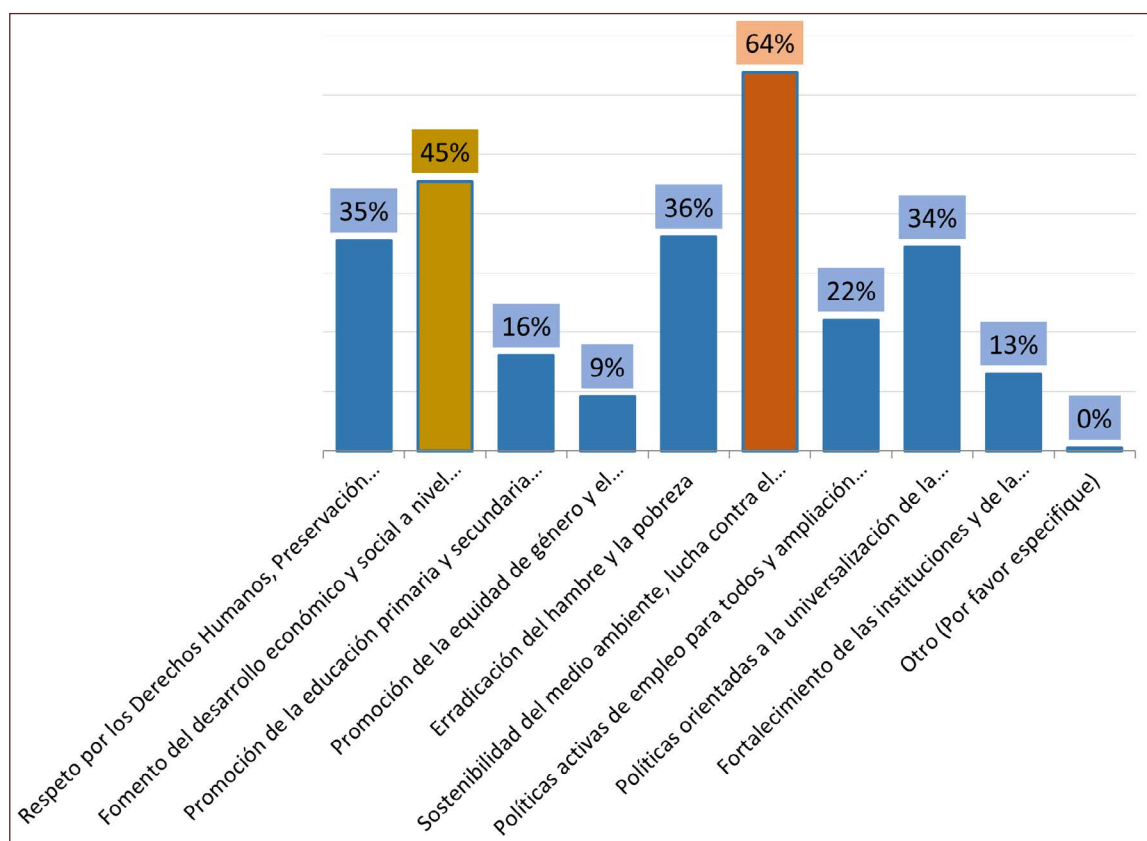


**Source:** Own elaboration.

Analysis. As seen in Figure 3, environmental issues emerged as a central concern from the student surveys, with 38% indicating a preference for nature conservation as the top priority, followed by 37% choosing health sciences, likely due to the pandemic's aftermath and the need for more professionals in these fields. Options related to information technologies and artificial intelligence also scored highly, reflecting the digital nature of these students. On the other hand, social sciences and journalism (11%), law and human rights (10%), and agriculture (10%) were the least favored areas. The lack of interest in these disciplines may reflect disillusionment with the current socio-economic structure, which has led to poverty, inequality, and injustice—issues that students may feel they have little influence over.

In addition to the survey results, the documentary research determined that in Colombia there are 15 on-campus university courses in environmental sciences and 21 in environmental engineering, which have been consolidated in the last 10 years, adding a growing number of students. This wide range of programs related to the environmental issue also attests to the growing interest of generations of digital citizens in caring for the environment.

**Figure 4:** After the pandemic and in the current context, for which of the following global issues should the University train professionals?



Source: Own elaboration.

Analysis. The results in Figure 4 clearly show that 64% of students favor sustainability and the fight against climate change, 45% support the promotion of global economic and social development, 36% are concerned with eradicating hunger and poverty, and 35% emphasize respect for human

rights. The shift in perspective regarding human rights, compared to the previous question (Figure 3), suggests that while students do see human rights as an urgent issue, they do not necessarily view it as a priority within university programs.

The findings strongly indicate, consistent with Figure 3, a deep-rooted concern for global environmental issues. This concern is closely linked to the next two chosen areas: economic development and poverty eradication. These results suggest that topics like primary education, gender equity, employment policies, and democratic governance are not viewed as priorities by students within the scope of global problems that the post-pandemic university should address.

The responses to Questions 3 and 4 highlight the environmental crisis as a significant concern for young people. These students, particularly the ones in their first semesters who experienced the pandemic and attended classes via video conferencing platforms, show a heightened awareness of environmental issues. This suggests that, in light of the immense concerns regarding natural environments and human health, universities should enhance their educational and research processes related to ecosystem conservation, food supply, and the prevention and treatment of emerging diseases.

On the other hand, Berdugo and Montaña (2017, p. 129) state that universities have a long research tradition and have been established as international organizations “that consolidate knowledge of subjects or areas of knowledge and mobilize a large part of the daily actions of companies and government institutions.” Likewise, under the pressure to provide solutions for the joint survival of humans and animals, they must be able to implement forceful actions of a pedagogical and social leadership nature that incorporate environmental education and human rights as a central axis for the care of the environment, based on the new dynamics that university environmental responsibility delegates to them.

Higher education institutions are the ideal setting to deploy, through their research, social extension, and teaching activities, the necessary mechanisms to generate environmental awareness and promote sustainability (Gómez; Botero, 2012); foundations that have been considered since the beginning of environmental and ecological studies in the 70s. The results of the surveys show a concern for the care of the environment and human rights that universities must assume from their mission purposes, not only with the diverse offer of university careers, but with environmental leadership and governance, and becoming green spaces that generate their own energy.

The evident decline of the model of industrial capitalism and the Welfare State at the end of the twentieth century, as well as the emergence of an economic model centered on financial capital, the extractive industry, together with new business models and the consequent environmental degradation, generated great cultural mutations in society, as well as in universities. The pandemic and the confinement that affected a large part of humanity around 2020 was a wake-up call for greater efforts to be made in the conservation of ecosystems with the understanding that deforestation and the loss of species open the door to new diseases.

## Conclusions

Higher education institutions are providing the environmental education that humanity established as a priority toward the end of the 20th century. However, this role in fostering environmental awareness also involves rejecting the capitalist and neoliberal socioeconomic model that these same universities once promoted. Therefore, a dual responsibility emerges: to rethink the economic model that originated in their classrooms and which now leads to the rapid deterioration of natural environments. In this context, when discussing a lifestyle in a particular environment, one is explicitly assuming cultural perspectives that establish identities and lead to the maintenance, reproduction, or transformation of the vital systems in which people and communities develop.

On the other hand, the same environmental vision, supported by the principles of environmental education for sustainable development, leads to an interpretation of a world where the important thing is the use of nature for the benefit of humankind. However, this interpretation can be viewed in two ways: one, the domination and exploitation of natural resources, with little or no action to mitigate the impact of environmental degradation; and two, the establishment of a comprehensive coexistence with ecosystems, under the understanding that humans are just one species among the complex networks of Mother Nature.

This latter conception leads to the understanding that the planet has limits, and that the human species also has the limitation of depending on the food derived from the biosphere. These levels of understanding and changes in habits are the challenges that environmental education still faces within the dynamics of a university that respects and promotes Human Rights.

It is therefore necessary, on the part of universities, to deploy more research in the prevention of climate change; promoting population control programs; strengthening the care of ecosystems and the life of species; and increase efficiency in the use of their own energy sources and natural resources. It is clear that anthropic activities exceed any natural limit, which generates serious risks for the survival of the human species and other species of nature. In this sense, it is necessary to follow the guidelines of the Club of Rome when they indicate that: "If the current increase in the world's population, industrialization, pollution, food production and the exploitation of natural resources remains unchanged, it will reach the absolute limits of growth on Earth during the next hundred years" (Meadows; Randers; Meadows, 1972, p. 157).

The first guidelines that made their way at the Earth Summit, or meeting in Rio de Janeiro in 1992 (UN, 1992) and the pressing indicators of climate change together with its obvious consequences, have penetrated the consciousness of today's young people, who, despite living immersed in technological gadgets, have a deep concern for environmental issues. There is a growing ecological trend that promotes the protection of the Planet and Economic, Social, Cultural and Environmental Rights, which should be oriented towards a paradigm shift from the current model of extraction, production, use and disposal, to one that promotes the reduction of consumption and the promotion of the circular economy.

## References

- ALONSO-GATELL, Aymee; ÁLVAREZ-AGUILAR, Nivia Tomasa; CASTILLO-ELIZONDO, Jaime Arturo. Proceso formativo ambiental universitario: trascendencia en la carrera de arquitectura. *CienciaUAT*, v. 11, n. 2, p. 54-63, 2017. <https://doi.org/10.29059/cienciauat.v11i2.828>
- BARKIN, David. *Riqueza, pobreza y desarrollo sustentable*. México: Jus y Centro de Ecología y Desarrollo, 1998.
- BAUDRILLARD, Jean. *La sociedad de consumo. Sus mitos, sus estructuras*. Barcelona: Plaza y Janés, 1970.
- BAUMAN, Zygmunt. *La vida de consumo*. México: FCE, 2009.
- BERDUGO, Norma; MONTAÑO, Wendy. La educación ambiental en las instituciones de educación superior públicas acreditadas en Colombia. *Rev. Cient. Gen. José María Córdova*, v.15, n.20, 2017. <https://www.redalyc.org/pdf/4762/476255362007.pdf>
- BOFF, Leonardo. *La opción-tierra: la solución para la tierra no cae del cielo*. Madrid: Trotta, 2008.
- CABRALES SALAZAR, Omar. El Principio del Buen Vivir o “Sumak Kawsay” como Fundamento Para el Decrecimiento Económico. *Cuadernos de Filosofía Latinoamericana*, v. 36, n. 113, p. 83-99, 2015. <https://doi.org/10.15332/s0120-8462.2015.0113.04>
- CABRALES SALAZAR, Omar; BERMÚDEZ, Jorge Antonio. Self-awareness, finitude, transcendence, and optimism in the human talent management of educational institutions in post-pandemic scenarios. *Revista Brasileira de Política y Admón en Educación*, v. 38, n. 1, p. 1-23, 2022. <https://doi.org/10.21573/vol38n12022.120293>
- CABRALES SALAZAR, Omar; MÁRQUEZ VARGAS, Florentino; RAMÍREZ, Raúl Díaz. De la extensión social a la responsabilidad ambiental universitaria en Colombia. *Revista Científica Comunidad, Creatividad y Aprendizaje*, v. 2, n. 2, p. 21-33, 2020.
- CALLEJAS-RESTREPO, María Mercedes; SÁENZ-ZAPATA, Orlando; PLATA-RANGEL, Ángela María; HOLGUÍN-AGUIRRE, María Teresa; MORA-PENAGOS, William Manuel. El compromiso ambiental de instituciones de educación superior en Colombia. *Praxis & Saber*, v. 9, n. 21, p. 197-220, 2018. <https://doi.org/10.19053/22160159.v9.n21.2018.8928>
- CÁRDENAS, José Martín. *Guía para universidades ambientalmente responsables*. Responsabilidad ambiental universitaria: compromiso y oportunidad. Lima: Red Ambiental Interuniversitaria/Ministerio del Ambiente, 2013.
- CARSON, Rachel. *Primavera silenciosa*. Barcelona: Colección Drakontos, Crítica, 1962.
- CEPAL. Comisión Económica para América Latina y el Caribe. *La sostenibilidad del desarrollo a 20 años de la Cumbre de la Tierra*. Avances, brechas y lineamientos estratégicos para América Latina y el Caribe. Santiago de Chile: ONU, 2011.
- DÍAZ, Elías. Estado de derecho y derechos humanos. *Novos Estudos Jurídicos*, v. 11, n. 1, p. 09-26, 2008.
- FERNANDES, Victor Alves; PAULA, Bruno Lucas Saliba de. A velha novidade da pandemia: Neoliberalismo, meio ambiente e Covid-19. *Ciências Sociais Unisinos*, v. 56, n. 2, p. 131-142, 2020. <https://doi.org/10.4013/csu.2020.56.2.02>



GÓMEZ, Catherine; BOTERO, Camilo. La ambientalización de la educación superior: estudio de caso en tres instituciones de Medellín, Colombia. *Gestión y Ambiente*, v. 15, n. 3, p.1-9, 2012.

<https://revistas.unal.edu.co/index.php/gestion/article/view/36282/42812>

GONZÁLEZ GÓMEZ, Diego Felipe. El Nobel que Encendió la Luz. Entrevista al premio Nobel de física Serge Haroche. *Diario El Tiempo*. Bogotá, 22 de enero de 2023.

<https://www.eltiempo.com/lecturas-dominicales/entrevista-a-serge-haroche-el-nobel-que-encendio-la-luz-735293>.

HARVEY, David. El Neoliberalismo como destrucción creativa. *Apuntes del CENES*, v. 27, n. 45, p. 10-34, 2008.

<https://www.redalyc.org/pdf/4795/479548752002.pdf>

JACOBI, Pedro Roberto. Mudanças climáticas e ensino superior: a combinação entre pesquisa e educação.

*Educar em Revista*, v. 30, n. 3, p. 57-72, 2014. <https://doi.org/10.1590/0104-4060.38107>

MATSUO, Patricia Mie; SILVA, Rosana Louro Ferreira. Desastres no Brasil? Práticas e abordagens em educação. *Educar em Revista*, v. 37, e78161, p. 1-23, 2021. <https://doi.org/10.1590/0104-4060.78161>

MAX-NEFF, Manfred. *Desarrollo a escala humana: Conceptos, aplicaciones y reflexiones*. Barcelona: Icaria, 1986.

MEADOWS, Donella; RANDERS, Jorgen; MEADOWS, Dennis. *Los límites del crecimiento*. Madrid: Taurus, 2012.

MOLANO NIÑO, Alba Carolina; HERRERA ROMERO, Juan Francisco. La formación ambiental en la educación superior: una revisión necesaria. *Luna Azul*, v. 39, p. 186-206, 2014.

<https://revistasojs.ucaldas.edu.co/index.php/lunazul/article/view/1767>

OEA – Organización de los Estados Americanos. *Protocolo Adicional a la Convención Americana sobre Derechos Humanos en materia de derechos económicos, sociales y culturales: “Protocolo de San Salvador”*, 1998. <https://www.oas.org/es/sadye/inclusion-social/protocolo-ssv/docs/protocolo-san-salvador-es.pdf>

ONU - Organización de las Naciones Unidas. *Informe de la Conferencia de las Naciones Unidas sobre el Medio Ambiente y el Desarrollo Río de Janeiro, 3 al 4 de junio de 1992*. Washington: ONU, 1992.

<https://documents-dds-ny.un.org/doc/UNDOC/GEN/N92/836/58/PDF/N9283658.pdf?OpenElement>

ONU - Organización de las Naciones Unidas. *Transformar Nuestro Mundo: la Agenda 2030 para el Desarrollo Sostenible*. Resolución expedida por la Asamblea General de la ONU 70/1. New York: ONU, 2015a.

[https://unctad.org/system/files/official-document/ares70d1\\_es.pdf](https://unctad.org/system/files/official-document/ares70d1_es.pdf)

ONU - Organización de las Naciones Unidas. *El futuro que queremos*. 66/288. Rio de Janeiro: ONU, 2015b.

<https://undocs.org/es/A/RES/66/288>

ONU - Organización de las Naciones Unidas. *Convención Marco sobre el Cambio Climático. Conferencia de las Partes 21, Acuerdo de París*. París: ONU, 2015c.

<https://unfccc.int/resource/docs/2015/cop21/spa/l09s.pdf>

PIKETTY, Thomas. *Capitalism in the Twenty-First Century*. Londres: Harvard University Press, 2014.

PNUMA - Programa de las Naciones Unidas para el Medio Ambiente. *Declaración de Estocolmo sobre el medio humano. Directrices y principios de derecho ambiental*. Washington: ONU, 1972.

<https://documents.un.org/doc/undoc/gen/n73/039/07/pdf/n7303907.pdf>

RED-DESC – Red Internacional para los Derechos Económicos, Sociales y Culturales. Priorizar el conocimiento de las comunidades. Enero 30 del 2023. <https://www.escri-net.org/es/about/mission/>

UNESCO - Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura. Declaración mundial sobre la educación superior en el siglo XXI: Visión y acción. *Revista Educación Superior y Sociedad (ESS)*, v. 9, n. 2, p. 97-113, 2019. <https://www.iesalc.unesco.org/ess/index.php/ess3/article/view/171>

VILLAYERDE, María Novo. La educación ambiental, una genuina educación para el desarrollo sostenible. *Revista de Educación*, número extraordinario, p. 195-217, 2009. <https://dialnet.unirioja.es/servlet/articulo?codigo=3019430>

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