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Is Degrowth Education an Alternative in the Minds of Educators in the Face of the Serious Eco-Social Crisis and Global Warming?

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Abstract: The aim of this research is to find out whether education students and professionals are aware of the seriousness of climate change and the environmental crisis and whether they receive training to deal with it in their professional future. More specifically, this study aims to analyze if they are aware of the degrowth proposal and consider they should train themselves and future generations in it to tackle this ecosystemic crisis profoundly. The methodology used was qualitative, through focused semi-structured in-depth interviews. The results of the data analysis, carried out with Atlas.ti, are structured around four dimensions: (a) Climate change, sustainability-consumption-social implications, (b) Growth, degrowth, collapse, (c) Personal attitudes towards caring for the planet and (d) Educating/training for degrowth. It is concluded that there is a general awareness concerning degrowth as a relevant issue and a possible alternative, but this is not applied in educational and curricular practice. The need to review the initial training plans for future teachers to introduce these elements is discussed. A limitation of this study is the scarcity of literature on degrowth in education and the need to expand the research sample in order to generalize the findings obtained in the research.

Keywords: degrowth; climate change; curriculum; teacher training; sustainability



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1. Introduction

Given the serious global socio-environmental deterioration affecting the ecosystem, it is essential to reconsider how to advance towards the construction of a society and a planet based on a more respectful and sustainable model in the present socio-historical context [1].

Climate change began to be discussed in various social, scientific, and academic circles in the 1940s. The 1970s was the decade that accentuated the idea of climate change as an

inescapable reality and a fundamental factor in a serious eco-social crisis affecting the planet and humanity. The report *The Limits to Growth* [2] warned that, if the level of consumption, pollution, and exploitation of natural resources continued, the planet's limits would be reached within the next hundred years.

1.1. Climate Change

Air pollution is one of the most challenging global sustainability issues in the world. According to the World Health Organization's air quality guidelines, approximately 90% of the world's citizens live in areas that exceed acceptable levels of air pollution. However, socially disadvantaged groups are disproportionately located in areas exposed to higher levels of air pollution. Understanding the association between exposure to air pollutant risk and the underlying socio-economic factors that determine risk is fundamental to sustainable urban planning [3].

The impact of climate change is a global phenomenon that is affecting impoverished countries to a greater extent and currently generating environmental migrations [4]. In 2019, high temperatures on different continents broke all records and negatively altered the health and well-being of the population [5]. Subsequently, this has been repeated. In July 2024, the planet experienced the warmest day on record in recent history according to preliminary data from the Copernicus Climate Change Service [6].

According to [7], climate change implies adverse effects on human beings, such as loss of life, fewer livelihoods (agriculture, fishing. . .), physical and mental health problems, less perceived well-being, fewer economic resources, and social problems, among others. Climate change mainly affects impoverished countries whose natural resources necessary for their survival diminish and do not have sufficient infrastructure to cope with more severe climatic conditions, such as earthquakes, fires, floods, etc. [8].

It is estimated that by the end of the 21st century, 3 to 6 billion people could find themselves outside the Earth's habitable regions, facing intense heat, limited food availability, and high mortality rates [9].

Climate change is posited as humanity's most important challenge. Yet, it must effectively become a priority on the political and societal agenda in the short term, in the face of the more than likely current trajectory towards widespread collapse [10]. It seems as if the climate crisis does not change people's perception of vulnerability. Its general consideration is that of an ethereal phenomenon, remote in time and space, vague in its causes, alien in its consequences, and, in any case, with possible technological solutions in the future [11]. Its most 'fierce' version is the denialism that exists at the social level, which is defined as a widespread political strategy while its true interests are often hidden and distorted [12].

Therefore, the correlative apathy in education about this serious and lethal problem is unsurprising, as the school is nothing but a reflection of society. However, in this scenario, it is necessary for academic-educational research to give climate emergency the transcendental importance derived from its threat potential. This aim must be achieved by setting programs and agreed-on agendas that give priority to the improvement of knowledge and the pedagogical training of current and future generations. Thus, contemporary societies will become aware of its seriousness, demand effective response policies and actions, and actively participate in their implementation [13].

1.2. Growth vs. Degrowth

Today's society is based on a culture of growth and consumption. This has increased exponentially to become a serious threat to the future of humanity and life on this planet [14]. It has even become an indicator of unhappiness rather than a sign of the opposite [15,16].

The growth society is not only unsustainable as it does not consider the planet's regenerative capacity but also profoundly unequal: 20% of the world's population owns 86% of natural resources, while 1.3 billion people suffer extreme poverty (less than a dollar a day) [17–19]. The enriched global North sets the rules of the international game, organizing a system of unequal exchange and turning the global South into extractivist sacrifice zones [20,21].

For this reason, it is pointed out that climate change or the ecosystemic crisis are but symptoms of capitalism's underlying problem [22–25].

Therefore, at this historic moment, it is crucial to rethink how to advance in the construction of a society that develops a different, more sustainable, and fairer model, given the situation of overproduction and overconsumption, as well as the tremendous global socio-environmental deterioration that capitalism generates in our ecosystem [1].

Degrowth has thus become the most solid global alternative that proposes a reduction in production and consumption to what is necessary to achieve social and ecological sustainability [26].

The 2022 reports of the Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) indicate that degrowth policies should be considered to enable the fight against climate change and biodiversity loss [27].

1.3. Educating/Training for Degrowth and Avoiding Collapse

Higher Education cannot ignore the above-described situation and has a great social and formative responsibility with respect to eco-social challenges. It should promote critical and updated education from the perspective of degrowth [28]. In this framework, it is essential for academic and educational research to give climate emergency the crucial importance it deserves due to its threat potential. Thus, establishing educational programs and common agendas prioritizing didactic knowledge's improvement and impact [29].

Constructing a society of degrowth implies a whole work of cultural deconstruction of the current thinking that establishes a direct relationship between economic growth (more production, more consumption) and development and prosperity. In this way, growth has become the *mantra* systematically repeated as a means to get out of any crisis [22,30].

One of the plausible and most reiterated hypotheses is that resistance to change at present is mostly due to people and communities lacking a 'real' and 'adjusted' knowledge of the present eco-social crisis and how to confront it. In this sense, there is also a lack of awareness of the consequences for the planet, humanity, and future generations [10,31]. For this reason, education is a key factor in the transmission of scientific knowledge that allows the construction of a real picture of the situation, its short and long-term effects, and the possibility of acting accordingly [32–38].

2. Research Objectives

The aim of this research was to find out the opinions of education students and professionals on:

1. The reality and consequences of climate change and the current environmental crisis.
2. Whether they consider that education and training in degrowth can be a necessary tool to promote a solid alternative.
3. Whether they believe that they should receive education in and for degrowth in their initial training.
4. Whether they believe that the education system should incorporate this education at all educational levels as a priority.

3. Research Methodology

The research methodology used is framed within the qualitative paradigm [39] which provides a more comprehensive and in-depth view [40].

The research instrument used was a focused, semi-structured, in-depth interview [41]. The interview was validated through expert judgment and group matching [42]. It was conducted using five open-ended questions, although, within each question, several questions could be asked depending on the conversation that arose with the interviewee.

The sample consisted of 20 students in their initial training period in different degrees related to education and education professionals, between the ages of 18 and 40. The sample consisted of 12 women and 8 men linked to the field of education: 6 education professionals (3 primary and 3 secondary school levels) and 14 students (5 secondary school master's students and 9 primary school undergraduates).

The sampling was intentional, non-probabilistic, and consisted of choosing the participants according to the characteristics of the population under study and the objectives of the research.

The interviews lasted an average of 70 min, and some of them had to be conducted in two consecutive sessions. The interviews were audio-recorded and transcribed using the coding software ATLAS.ti v.8 (2023), Scientific Software Development GmbH (Berlin, Germany) [43]. The interviews were based on 5 blocks of questions: conceptualization of climate change, the unsustainability of the current level of consumption, theory of collapse, the conceptualization and implementation of degrowth, and educating in degrowth. These, in turn, branched out into another series of questions in relation to the subjects' answers.

Coding was carried out using analytical induction, examining the collected data for categories and relationships between them. This coding process of the 20 interviews allowed for the creation of quotes and memos based on text segments, through open or in vivo coding, where the selected text is understood as code. At the same time, groups of codes that interrelated with each other were generated, forming families of codes. These families have been organized to form semantic networks, on which a theoretical interpretation of the results that emerged has been proposed; thus, constructing conceptual maps of code networks that attempt to answer the research questions.

The qualitative data software ATLAS.ti allowed the constant comparison of coding and data simultaneously to develop explanatory models, i.e., to constantly compare and relate data between the codes and the categories that emerged.

In this way, the respondents' answers were grouped into the following four categories:

- Climate change, sustainability–consumption–social implications.
- Growth, decline, collapse.
- Personal attitudes towards caring for the planet.
- Educate/train for degrowth and avoid collapse.

4. Results

The results of the analysis of the interviews structured according to the four categories are presented below. The results are presented using the codes obtained in Atlas.ti (sentences in italics with a capital letter) and, in each category or subcategory some of the most significant sentences from the interviews are highlighted as illustrative examples.

4.1. Climate Change, Sustainability–Consumption–Social Implications

The questions from the in-depth interview considered to be associated with the first dimension were the following:

What is climate change for you? Do you think it is a problem? Why do you think young people have mobilized against the climate crisis? Would you be willing to do so?

What would you do? Do you think measures should be taken at a social or political level in addition to what you do? Who should take them? What do you think these measures should be? Is it possible with the current level of consumption to grow in a sustainable way? Do you think it is possible to continue producing and consuming as we do today in the West and in the North? Do you know it would take two and a half planets to continue sustaining this level of consumption if it is extended to the whole world? What would be the social implications of continuing to grow at a productive level and, therefore, of consumption continuing to grow? Given that if the whole planet lived like the North Americans or Europeans, it would mean that 2.5 planets would be needed to maintain our pace of life, what do you think the solution should be: to reduce the population or to consume less?

In Figure 1, we analyze the network of codes on *climate change, sustainability and the social implications they entail*. We find 6 subcategories of explanatory codes that have been grouped by color: *The process of environmental change* (blue-green), *human action* (dark blue), *production and consumption* (orange), *socio-political measures* (green), *economic measures* (brown), *extreme temperatures* (red).

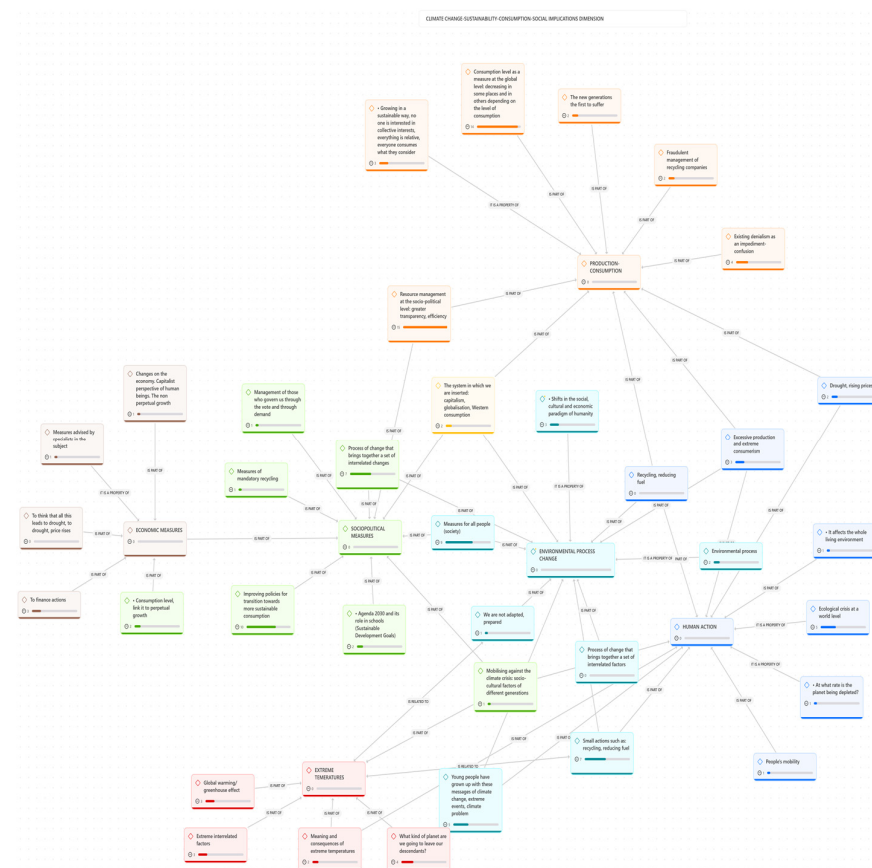


Figure 1. Code network. Category: climate change, sustainability-consumption-social implications. Source: Own elaboration.

Thus, within the subcategory *the process of environmental change*, it is clear that changes in the social, cultural, and economic paradigm of humanity need to be generated. Young people have grown up with these messages of climate problems. A change process is needed in the sense of implementing measures for a population which may not be prepared to assume them. Small actions such as recycling, reducing fuel, etc. need to be taken to develop these environmental changes. However, in the present context, citizens continue to show a lack of interest and scarce sensitivity at a general level towards the group and individual commitment to behaviors that have a real impact on the climate.

Looking more deeply into *human action*, their responsibility for the global ecological crisis is indicated together with *excessive production and extreme consumerism*. Other effects of human action are recognized, such as *drought, extreme temperatures, global warming and the greenhouse effect*. All these affect the environment and the living environment. And it influences the rate at which the planet is being depleted. This leads to a reflection on *what kind of planet will be left to our descendants*.

The following answer exemplifies the above-mentioned:

“For me, climate change means the change of all patterns, of environmental processes, of climate, of weather and it is linked, as I say, to many, many other factors. So, with climate change we are talking about areas that can become much colder and more extreme, areas that can become much more desertified, obviously the temperatures, areas that perhaps used to have monsoon rains, and then perhaps they will follow that same event in a much more extreme way”. [interview 6-JMN].

To reverse these situations, they propose recycling and reducing fuel consumption on the planet. They also suggest economic measures such as financing actions to alleviate the consequences mentioned, producing changes in the economy, and analyzing the capitalist perspective of the human being. These measures should be advised by specialists in the field.

In addition to these economic measures, there are also *socio-political measures*, such as *improving transition policies towards more sustainable consumption*, as well as measures on mandatory recycling and others. It is also pointed out that the *existing denialism adds confusion and hinders progress*. For this reason, they consider it necessary to *implement the 2030 Agenda and its role in schools and education* (through the applied teaching of the Sustainable Development Goals). The following answer exemplifies these proposals:

“I think that now that we are in a society of rampant consumerism, (...) our model of life has to adapt to the possibilities we have. In other words, we cannot consume more than the earth can bear. Evidently, and this is something we are doing, and it is something that is unsustainable. It has an expiry date. So, I think that we really have to, in other words, we have to decrease, in other words, we have to put the brakes on it in that sense”. [interview 7-MCP].

It has also been pointed out that it would *be necessary to decrease in some places and in others, depending on the level of consumption*. On the other hand, it is important to focus on managing production and consumption through the *management of resources at the socio-political level, enabling greater transparency and efficiency* in this regard.

Thus, it is proposed that the *level of consumption should be developed as a global measure*. Therefore, it would be necessary to decrease in some places and in others depending on the level of consumption. On the other hand, the existing denial of climate change is an aspect of impediment to progress and confusion. Another aspect is that of *sustainable growth*, as it is observed that *nobody is interested in the collective, as everything is relative, each person consumes what one considers and, therefore, it is necessary to include socio-political measures*. This shows that the interviewees understand the path towards improving the socio-economic system. However, this does not always match with a proactive attitude regarding greater consumption, as can be seen in several of the interviews where the subjects are self-critical.

4.2. Growth, Decline, Collapse

The questions from the in-depth interview considered to be associated with the second dimension were the following:

Do you know the theory of collapse (of this system)? If so, what do you think it consists of or what does it refer to? Everything discussed above has led us to consider the need for degrowth. Have you heard of degrowth? What do you think it means? Do you think that the solution to the climate crisis and care for the planet involves, for example, making more ‘green cars’ or ‘stop making so many cars’? Do you think that having so many private cars, or private jets and yachts, is a necessity or a desire and a luxury? Do you think that the global solution should be degrowth? Why do you think that it is not a term that is talked about at a political level in our country?

Figure 2 explains the network of codes on *Growth, Decrease and Collapse*. Four sub-categories of explanatory codes were found: Concept of degrowth (light blue color); Solution: population reduction-consumption reduction (dark green color); Excessive consumption level-sustainable growth (light green color); Implications of excess consumption (orange color).

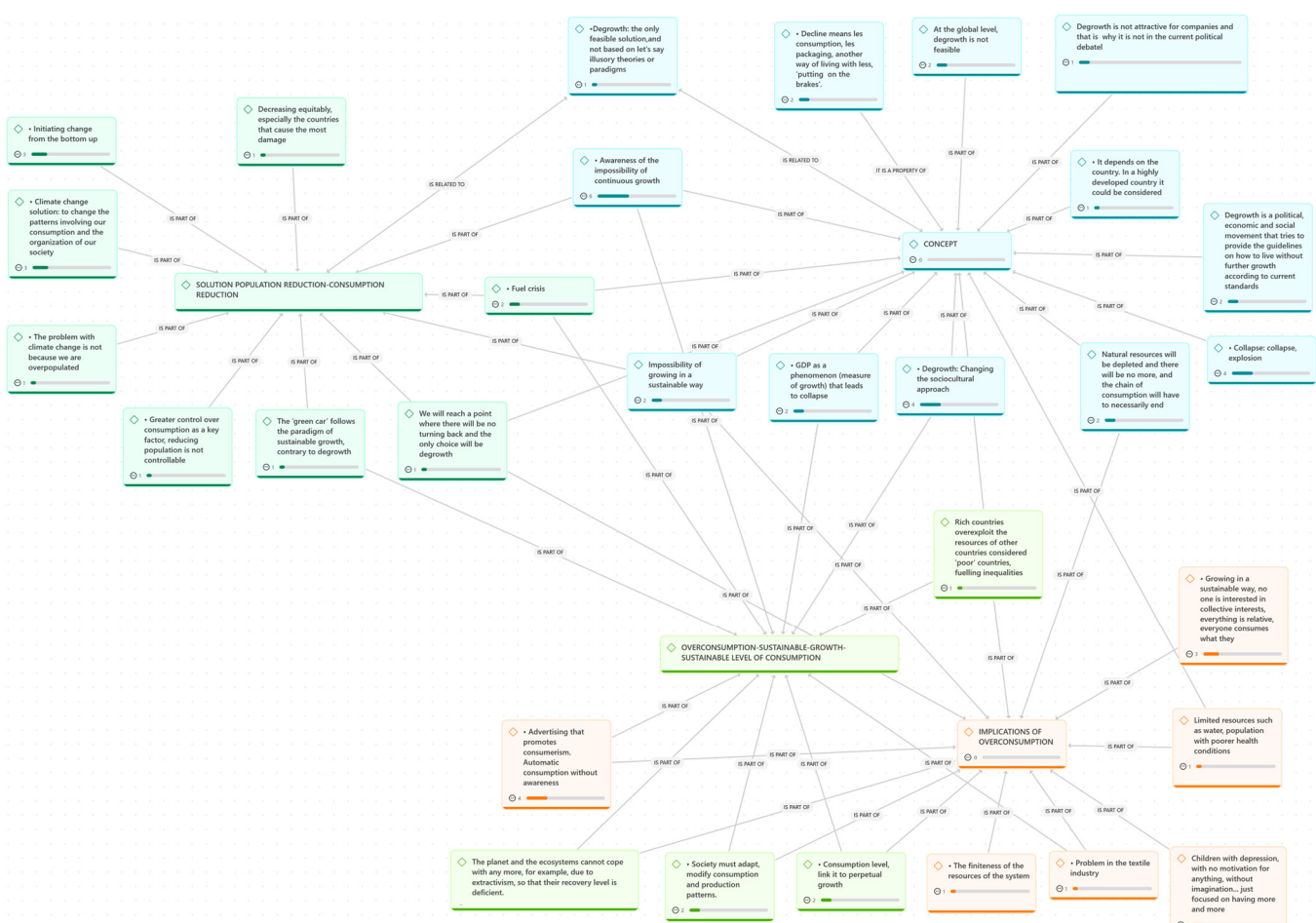


Figure 2. Network of codes. Category: Growth, decline, collapse. Source: Own elaboration.

On the concept of degrowth, they point out above all the *awareness that continuous growth is not possible, and, therefore, degrowth must be considered, being necessary to change the socio-cultural approach adopted up to now*. They describe degrowth as *an economic and social political movement that tries to give the keys to live without continuing to grow according to current standards, since natural resources will be exhausted and there will be no more to throw away and the chain of consumption will have to stop forcibly*.

The term *Collapse* is identified as a collapse in the sense that material resources do not reach everyone and, therefore, there would be a collapse on the existing resources, “*it explodes*”. So, *degrowth means using less consumption, less packaging, it is another way of living*

with less, “putting the brakes on” consumption. Degrowth, he adds in an interview, is *the only feasible solution*. Although other interviews warn that at a global level degrowth is not feasible, since it *depends on the country*. In a highly developed country it could be considered, despite it is not attractive for any company and that is why it is not in the current political debate. The following answer exemplifies this:

“Yes, I had heard the term, and it seems to me quite accurate. Private jets/yachts/planes seem to me to be expendable luxuries, but they are just one example of the many wastes that people with money generate. I think the solution would be to stop manufacturing so many cars, but at present they are not going to accept that; maybe when the planet is on the verge of collapse and there is no turning back they would apply it”. [interview 13-MPG].

In the subcategory *Solution population reduction-consumption reduction*, there is a need to propose solutions to climate change, such as changing personal and social consumption patterns. For the development of solutions, greater control of consumption is proposed as a key factor, since reducing population is not controllable and the problem of climate change is not due to overpopulation. Moreover, the reason posed is that of no turning back point. There will then be no choice but to decrease. It is also a matter of decreasing equitably, especially in the countries that cause the most damage by consuming excessively. As an example of the contrast between sustainable growth and degrowth, a paragraph from one of the interviews is quoted below:

“Sure, because the green car thing would follow the sustainable growth paradigm of look, go on, go on with your same pace of life that we are going to try to make this look like you are contributing to the care of the planet, but not really. I think the paradigm that we should follow is more of a degrowth paradigm: to use fewer cars and therefore less car production”. [interview 1-LFR].

The subcategory *Solution population reduction-consumption reduction* is directly related to that of the *Level of excessive consumption-sustainable growth*. It is expressly stated that society must adapt and modify consumption and production patterns linked to perpetual growth. It is considered that the planet and the ecosystems do not have enough for more, due, for instance, to extractivism, so their level of recovery is deficient. Rich countries overexploit the resources of other countries considered “poor”, fostering inequalities.

All the above-described leads to the last subcategory *Implications of overconsumption*, where aspects such as the progressive disappearance of limited resources (water), population with worse health conditions, and the finiteness of the system’s resources stand out. One aspect highlighted for promoting consumerism is advertising, since it invites automatic consumption without conscience. As an effect of the excess of consumerism, there are children with depression, with no motivation or imagination, only focused on having more and more. The following answer exemplifies this:

“People are informed, but nevertheless, consumerism is very well established, because they want: the best cell phone, the best TV... And children are also growing up in that. So much so that, at school, whoever doesn’t have a latest-generation cell phone is already left behind, let alone the one who doesn’t have one”. [interview 4-EMC].

The term *collapse* is not defined very accurately, and there is a tendency to consider degrowth as a possible opportunity to avoid such a point. As the interview progresses, a greater awareness of what is happening is shown. The participants also recognize how these interviews help them think about their behavior and its impact on the environment in which they live.

4.3. Personal Attitudes Towards Caring for the Planet

The questions of the in-depth interview considered to be associated with the third dimension were the following: What personal and group attitudes can be implemented to favor degrowth? How do you think these solutions should be applied?

Figure 3 analyses the network of codes on *Personal attitudes towards caring for the planet*. One subcategory of explanatory codes was found: *Practice the “5 r’s”: refuse, reduce, reuse, repurpose and recycle* (gray color). To improve the care of the world the need to perform actions such as *recycling*, *reducing* superfluous spending, *repairing*, *reusing*, and *redesigning* materials necessary for the care of the planet is emphasized, since there is an *unsustainable exacerbated consumption*. There should also be a *personal stance on global warming*. Thus, some personal actions can be practicing a *vegan diet*, *using pedagogy with friends*, and *changing one’s context*. It is even a *commitment not to need the car*, to *change the cities so that it is not necessary to move by car*, to *use electric cars*, to *use public transportation*.

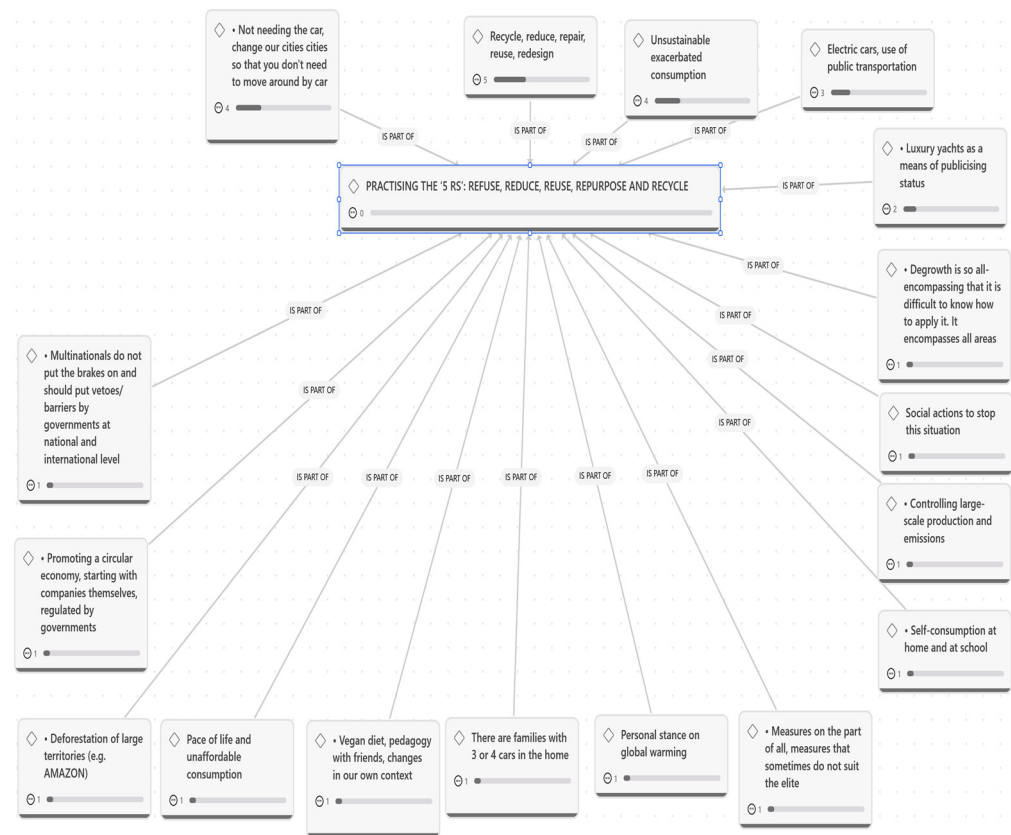


Figure 3. Code network. Category: Personal attitudes towards caring for the planet. Source: Own elaboration.

Responsible self-consumption should also be accomplished at home and at school, along with social actions to stop this situation. On the other hand, the circular economy should be promoted starting from the companies themselves and regulated by governments. It is also considered that multinationals do not slow down and should be banned/barred by governments at the national and international levels. In addition, it would be necessary to control the large production and emissions of companies or the deforestation of large territories (e.g., the Amazon).

Therefore, some measures should be applied by all, measures that sometimes do not suit the elite. Since degrowth encompasses so much, it is difficult to know how to use it. It is all-encompassing. An example of this appears in the following text:

“Politicians have a part of responsibility, to represent all of us, and each one of us in a democratic country or with real democracy. I think that has its importance, the role of politicians, but fundamentally we are the people of the whole of society, those who change things and if we do not do it together. The politicians in office who may come out at any given time will not be able to make all the changes because they need people, for example, one of the issues I mentioned before, for example, that recycling should be mandatory. This can be made a law, but if society itself and we, as people, do not internalize it as something really necessary and important, it will be of practically no use, because in the end laws can be put in place. Still, people have to agree with those laws in a natural way so that those laws make sense and have effectiveness. So, I think that everyone has a role to play, from the individual to the politician and going through all the possible stages”. [interview 19-IMC].

Society manufactures, produces, and invests in a series of goods and material resources considered as necessary items. However, it seems these have been created as desirable for the very mutation of the capitalist system of growth. Although it is something that the interviewees discuss with certain clarity, they do not see a way out of the system they are part of as can be seen in their answers and reflections.

4.4. Educating/Training for Degrowth and Avoiding Collapse

The questions from the in-depth interview considered to be associated with the fourth dimension were the following: Do you consider that educating in degrowth can help future generations to be more aware of the current situation and thus be able to reverse it? What educational–pedagogical measures do you consider interesting to implement with your present or future students to “educate in degrowth”? To what extent do you consider it important that this topic is addressed in the initial teacher training curricula and in the official curriculum of primary and secondary schools? Do you think that we are “obliged” at an ethical–pedagogical level to face this situation in schools and classrooms?

Figure 4 explains the network of codes on *Educate/train for degrowth* and avoiding collapse. Five subcategories of explanatory codes were found: *Degrowth: concept* (gray), *Degrowth: solutions* (red), *Ethical–pedagogical level of training in degrowth* (dark blue–purple), *Educational measures to reverse degrowth* (green), *Educational–pedagogical measures for future students/teacher training* (light green).

Within the subcategory *Degrowth: concept*, it is observed that degrowth implies such profound changes in societies and in the economic systems associated with consumption, growth, globalization, and production, and its consequences are not dealt with at school. Education is perceived as a tool to improve the world as long as it is understood as an improvement for everyone; so, it seems something is failing. The following answer shows a reflection on the matter:

“I would rather go to the syllabus, to the contents that should be introduced in schools, and I believe that we should have a wide range of environmental sciences, which we already have, but always linked to teaching the impacts that each of the human activities has on the world. Any impact should be studied. In short, we should instill in young people the knowledge of the impacts and make them aware of the capacity we have as human beings to make changes in our environment”. [interview 6-JMN].

This subcategory is, in turn, related to the subcategory *Degrowth: solutions*. Education appears repeatedly as a fundamental solution, as the most powerful element for transformation and change in the face of this current situation. For example, *educating for the democratization of sustainable consumption, understanding how countries must accept teaching*

climate change in their educational system, in addition to educating to rethink our lifestyle and thus be able to change it. As additional options to accompany education, it is proposed to rely on fines, laws, and penalties for those who fail to follow the roadmap, and also to make agreements at the international level (United Nations: International Roadmap), a global agreement.

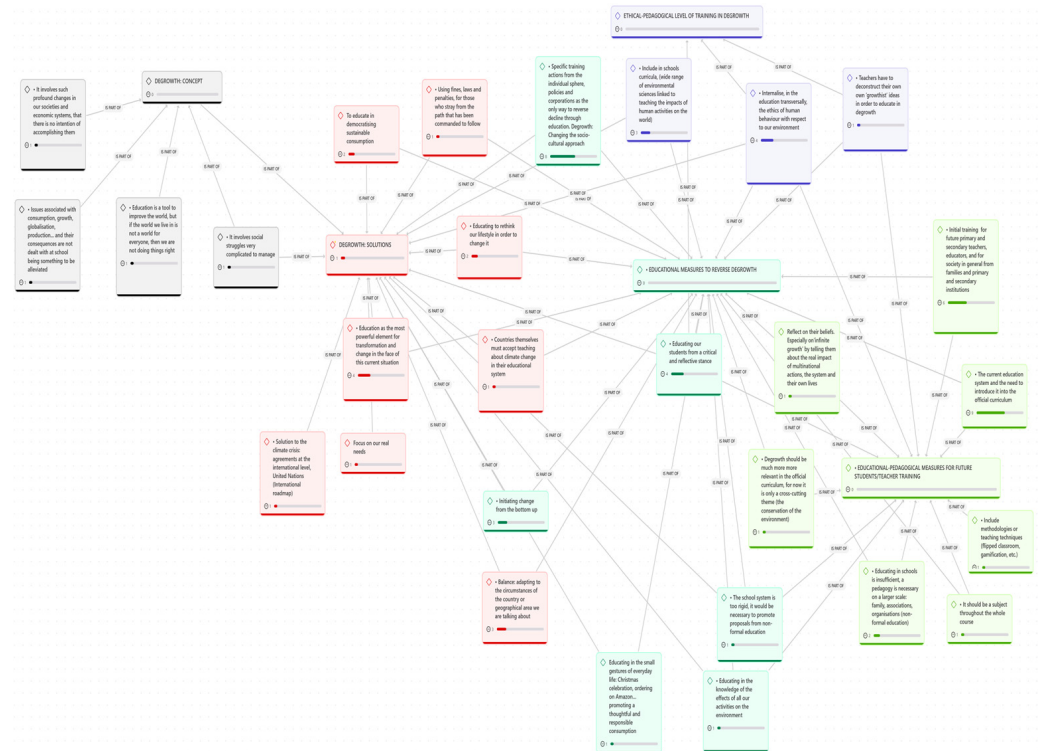


Figure 4. Network of codes. Category: educate/train for degrowth and avoid collapse. Source: Own elaboration.

In the subcategory *Educational measures to reverse degrowth*, the importance of carrying out concrete training actions individually and in policies and organizations as the only way of educating in degrowth is indicated. In this way, education is a fundamental pillar to be able to advance in degrowth and change the sociocultural approach adopted. Therefore, it is necessary to educate students from a critical and reflective perspective; for instance, by helping students understand how human activities impact the environment, as well as the importance of small gestures of everyday life (Christmas celebrations, orders on Amazon, etc.) to promote thoughtful and responsible consumption.

The importance of being socialized in a culture of sustainability in addition to formal education was also noted: “I believe that society must be educated to modify its consumerist “instincts”. If demand declines, production will surely decline as well. Perhaps, if production decreases, the product created will be more sustainable and of higher quality”. [interview 17-JMS].

This subcategory is directly related to the subcategory *Educational-pedagogical measures for future students/teacher training*. Interviewees consider it necessary to include initial training programs for future teachers, lecturers, or educators on these issues. This need applies to society in general, to families and institutions related to primary and secondary education, since the current educational system does not include this training in the official curriculum. Therefore, degrowth should be much more relevant in the official curriculum, for now, it is just a cross-cutting issue (environmental conservation). Students should reflect on their beliefs.; above all on “infinite growth” by learning how the actions of multinationals, the system, and their own lives can impact the environment. It was also

noted how care for the environment should be a subject throughout their courses, fleeing from clichés and disqualifications that are not applicable to degrowth: “It would be key above all to teach them how to transmit it and how to focus and to say that growth is not really a return to the hippie communes, in other words, that we can really maintain a lifestyle of 2024 without continuing at the pace we are at, without scaremongering”. [interview 7-CPM].

These two subcategories (Educational measures to reverse degrowth and Educational-pedagogical measures for future students/teacher training) are also related to the subcategory *Ethical-pedagogical level of training in degrowth*. This subcategory indicates the need to include environmental ethics in education transversally. In this sense, teachers need to deconstruct their own “growthist” ideas in order to educate in degrowth: “We are obliged at the pedagogical ethical level. It is a problem that affects us all, and we are not provided with information or tools to solve it. Education is a base from which these principles can be established, although they should necessarily be in the curricula of initial teacher training and in the official curricula”. [interview 20-IZS].

Decreasing implies reusing, reducing, repairing, restoring, remanufacturing, recycling, and recovering, to make the subsistence of human life and the different species possible. This would enable joint action for mutual support, solidarity, and wealth sharing at the community level. Redefining well-being through the key idea of living with less to live better would lead society to value the immediate context to a greater extent and to associate happiness with the common good and not with the fulfillment of consumerist individual desires. All of this is reflected in the responses of those interviewed, although they find it extremely difficult to transmit it in the classroom, due among other aspects, to the excessive level of consumerism that permeates the family and social upbringing. The result is an imaginary of continuity regarding the idea of infinite growth.

5. Discussion

Regarding *Dimension 1*, it should be noted that there is awareness of climate change. The importance of another more coherent management of resources, as well as improving transition policies towards more sustainable consumption and pedagogical and awareness-raising measures for society in general is highlighted. However, the concept of climate change seems a bit diffuse. This is an advance over what González-Gaudiano and Meira-Carteá [10] indicate in their research regarding the fact that society has not realized or does not want to realize the urgency and necessity of this change.

Despite the broad scientific consensus on the evidence of climate change, it cannot be forgotten that significant political, ideological, and economic resistance is currently significant political, ideological and economic resistance paralyzing initiatives to address global warming [43]. Numerous research works confirm the existence of this movement of denial of climate change; a movement which denies the evidence of the dynamics of global environmental change. The anthropogenic component of it, as well as counter-movements, their funding, their organizational structures, and the discursive impacts of their narratives on the public, should be considered [44–48].

Regarding *Dimension 2*, it should be stressed that degrowth is perceived as a sociocultural transformation in the face of the impossibility of continuous growth. It is considered that society must gradually adapt to a culture of degrowth and change consumption patterns such as the use of public transport and energy, etc. Degrowth, therefore, transcends the idea of sustainable development within the framework of capitalism. It seems then that a greater awareness begins to emerge in the face of biophysical limits and the impossibility of defending “our lifestyle”, and at the same time, preserving a liveable biosphere, i.e., the need to adapt to a radically new situation [33].

In *Dimension 3*, it is recognized that caring for the planet on a global level involves at least the “5 r’s” (recycle, reduce, repair, reuse, redesign). This means combating the current unbearable pace of life and consumption but simultaneously establishing political measures in the face of a capitalist system dominated by multinationals that should be vetoed/barred by governments at the national and international levels. That is, to face the limits of the planet through personal attitudes that modify our lifestyle such as not needing a car “for everything”, changing our cities so that it is unnecessary to move by car, and raising global political measures. An example of the latter is establishing a regulation or prohibiting the use of the unnecessary as promoted through advertising, by creating desires that do not respond to basic human needs.

All this is consistent with the studies of Calixto [49] and Morote [50], where they show how, for students, there are two main forms through which they channel their intervention: (a) activism and (b) remedial actions [49,50]. Research and studies gather experiences and proposals from a sector of students who insist on a certain inflation of confrontational “hyperactivism” and actions—both symbolic and directly confrontational—to denounce the consequences of climate change and the overcoming of the planet’s limits. These actions seek to draw attention and generate a particular media agenda as a way for public policies to act [50].

Regarding *Dimension 4*, this study has a special emphasis on the importance of educating and training in degrowth, based on two key aspects:

(a) Degrowth through contents and knowledge training in the official curriculum. There is a need to introduce the issue at the initial level of the educational system, enabling reflection–action on the current situation to allow changes, starting from the fallacious beliefs of “infinite growth” prevailing in the system. In this sense, it is necessary to educate in rethinking our lifestyle and thus being able to change it. This also requires pedagogy on a larger scale: family, associations, social organizations (non-formal education), etc. Education is to be conceived as the most powerful element for transformation and change in the present situation.

(b) The introduction of degrowth in initial teacher training, which will help teachers to deconstruct their own “growthist” ideas, promoting concrete training actions from individual, social, collective, and political standpoints.

This coincides with the studies of Flores [51] and Pérez-Robles et al. [29] when they indicate that it is crucial to reform the curricula of the Faculties of Education of all universities. The aim is to make this training in degrowth a priority in the curricula, which is reflected in the contents, the required competencies, the evaluation criteria, and the global approach to training.

Finally, it should be noted that this study is limited by two factors. On the one hand, the scarce academic literature on degrowth pedagogy, especially on specific experiences or practices that reflect the teaching and didactic lines of action of this pedagogy in classrooms and educational centers. On the other hand, it must be recognized that the sample participating in the research was small and, although the results may be relevant due to the research instrument used (the in-depth interview), the sample should be enlarged and strengthened to make it more representative and complete. In this sense, it is considered necessary to conduct future research from a mixed methodological approach and to triangulate different research instruments that complement the information collected. In addition, there is a need to continue to deepen in such a crucial topic in which the life of the planet and of the species is at stake.

6. Conclusions

It should be highlighted that the objective of the research has been achieved in a reliable manner. Given the lack of time to experiment -trial and error- with possible responses to the collapse, the predominant intervention strategies which have been focused until now on awareness and sensitization, should be combined with those that go a step further. A political and committed step is needed: educating in a spirit of critical dissidence, i.e., in civil disobedience opposing climate collapse and the destruction of the planet in the face of a system that is dragging us to extinction as a species and as an ecosystem [30].

Education students and professionals at different levels must be aware of the energy transition sold to society as an alternative. It is simply impossible to achieve this option without a global reduction in the production and consumption of energy worldwide, especially in the countries of the so-called First World. It is from this stark reality that an effort must be made to explain to the youngest citizens of our society how infinite growth is impossible and how consumerist attitudes are leading directly to the extermination of the human species and of all forms of animal and plant life. Unfortunately, educational policies are not geared towards this, as they deliberately ignore the environmental impact that human action has on the environment. All of this is accentuated through a neo-liberal commodification process based on maximizing profits for a very small part of society to maintain their social, political, and eco-economic privileges.

University teacher training must develop a collective change in favor of degrowth that adjusts to the needs of the biosphere's limits. It should focus on the advantage of two-way and continuous teacher–student communication and on the reflective stance alluded to in this study: (a) the epistemological perspective of the concept of degrowth and the necessary teacher training in ecology, which can respond to the scientific, technological, social and economic (STS-e) challenges. This training should focus on essential aspects of basic epistemological elements such as the development of key questions, the grouping of concepts capable of facing the difficulties and real contradictions about environmental education, sustainability, and degrowth; (b) the didactic perspective on the treatment of contents related to degrowth, and the holistic vision to cover different variables regarding what to teach and what types of contents are structured to tackle the complexity of eco-social and environmental problems. Therefore, a critical and instructive education is necessary; and (c) the sequencing of activities that are oriented towards the evolutionary, investigative, and formative evaluation of the concept of degrowth. Any activity must be based on a specific program or project in which the student analyses and attempts to solve socio-environmental problems through activities of exchange, contrast, participation, and reflection. This approach should also be reflected in the eco-dependence of human activity, the didactics of human history or food production, to train in Environmental Education, eco-agriculture, etc. [29].

In a teaching–learning process based on degrowth, the basic criterion must be to encourage adjustment to the new situation of the world; this implies a radical change in the contents in a double sense: reviewing and reformulating the meaning of traditional curricular contents in a degrowth key (so that their treatment is useful for understanding the clash with our biophysical limits and for training people to face it), and prioritizing the development of certain contents. Concerning the priority contents, it seems clear that all those that help the population to adapt to degrowth would be so.

Degrowth is proposed as a radical alternative to the capitalist system and its imaginary of unlimited consumption and growth. In short, ecology without class consciousness is nothing more than gardening. Educating in and for degrowth means a commitment to a model of society for the common good and social justice [22,52].

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