

# Presence of sustainability in the curricula of the Spanish State Degree in Pedagogy from an inclusive and socio-cultural approach

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## Abstract

An inclusive curriculum with a socio-cultural approach must include content on sustainability. This study raised the following problem: What is the presence of contents related to sustainability in the curricula of 24 degrees of Pedagogy of the Spanish state.? Through an explicit study, subjects directly related to sustainability were identified and analyzed through the qualitative data analysis program Atlas-ti. The categories of analysis used were those present in the Sustainability Thesaurus [4] to which the professional category was incorporated. The results showed, on the one hand, the low presence in these grades of subjects whose name indicates a direct link with sustainability and, on the other hand, On the other hand, the presence of professional competencies was detected, which were not subsequently specified in the corresponding learning outcomes or in the training content.

**Keywords:** sustainability, inclusive education, pedagogy, degrees, study plans.

## 1. Introduction

The idea of sustainable development is not new, nor is it even exclusive to the last twentieth century [21] places a precedent in the German states of the eighteenth century. However, it is in the last century that the need for a change in the exploitation of natural resources by humanity has been emerging [8].

Today, environmental degradation and human responsibility seem evident as they clearly influence the socio-cultural context. So much so that human action has given rise to a new geological era, the Anthropocene [19]. But environmental degradation is accompanied by a clear influence on human life, in its inclusive and socio-cultural context. This reality, which links environmental destiny to human social destiny, appears at the 1972 United Nations Conference on the Human Environment, which "for the first time, decisions aimed at reconciling environmental protection with the rights to a more just, economic and social human development" [8] (p.251). Thus, the care and protection of the natural environment must be accompanied by the care of humanity. In other words, human rights and quality of life. In this perspective, Sustainable Development (SD) [15] (p.34) makes sense:

- "Development has an economic, social and environmental dimension. The development will be sustainable only if a balance is struck between the various factors influencing the quality of life.
- The present generation has an obligation, vis-à-vis future generations, to leave sufficient social, environmental and economic resources so that they can enjoy at least the same level of well-being as us".

The current and existing developmental economic and social model imposes its logic: short-term economic objectives, regardless of the consequences [14] [22]. This logic negatively affects nature and humanity. The former is reduced to a source of resources to feed a linear economy with devastating consequences for humanity.

For its part, the DS, recognizing that the planet is not the exclusive home of humanity, seeks to achieve a human development that allows the care of the planet while allowing the care of

humanity. Thus, "sustainable development aims, at the same time, to combine an economic parameter (development) with a more behavioral and attitudinal one (sustainability)" [10] (p.21). The DS pursues sustainability which is "an endless quest to improve people's quality of life and environment, as well as to thrive without destroying the life-support systems on which present and future generations depend" [24] (p.19). Thus, sustainable development appreciates respect for nature and other humans and requires an alternative economy [1]. Respect for nature requires a change to a perspective that considers the natural as a good, which can be enjoyed, within the logic of its conservation. But it also demands respect for the other human being, of his dignity, that all people are valuable in themselves and have no price, no use value, and cannot be instrumentalized [16,11, 23]. This recognition of the dignity of the other is the basis of Human Rights (HR) that "are the demands of people to lead a dignified life, which must be recognized as a right by those who have sufficient estimates to grasp their dignity, and therefore, undertake to meet these requirements by the necessary legal and institutional means" [11] (p.135). Y, para cumplir ambas demandas, se hace necesario cambiar nuestro modelo social y, en especial, nuestro modelo de economía depredadora hacia una economía de ciclo cerrado y sostenible [12]. Therefore, we believe that talking about inclusion and talking about sustainable development is talking about two sides of the same coin, the currency of equity. If there is no guarantee of sustainability, inclusion cannot take place without the right context. The third edition of the Index for Inclusion [7] presents values and indicators that support inclusive education as inclusive cultures, policies, and practices where sustainability is a value:

"A key objective of education is to prepare students and young people for sustainable lifestyles within sustainable communities and environments in a local and global manner. Commitment to inclusive values implies a commitment to the well-being of future generations. The inclusion debate always contains the question "inclusion in what?". Inclusive schools are places that promote sustainable development through the learning and participation of all and the reduction of exclusion and discrimination. Action is sustainable when non-consensual changes are avoided in the short term, as well as when projects and programs that are unable to sustain their long-term commitments are avoided. Environmental sustainability is critical to inclusion at a time when degradation, deforestation, and global warming are threatening the quality of life for all of us and are also undermining the lives of millions of people around the world. Schools with inclusive development need to be aware of the importance of maintaining a natural environment within the school and beyond. But ecological commitment is something that must be born of understanding and respect for nature, not fear of catastrophe. It must be coupled with hope and optimism that risks can be overcome. To be sustainable, changes must be integrated into cultures and through them develop different identities" [7] (p.24).

The *Index* indicators present values directly related to SD from the socio-cultural and inclusive approach urging that people have a new relationship with the environment if they want to preserve the resources for life.

In this direction [7] (p.120) they point to a series of indicators to analyze a curriculum for all based on values:

"1. Students explore food production and consumption cycles.2. Students investigate the importance of water.3. Students study clothing and body decoration.4. Students investigate housing and the urban environment. 5. Students learn how and why people move around their locality and around the world.6. Students learn about health and interpersonal relationships.7. Students investigate the earth, the solar system, and the universe.8. Students study life on earth.9. Students are researching energy sources. 10. Students learn about communication and communication technologies.11. Students participate and create art, literature, and music.12. Students learn about work and how to link it to the development of their interests.13. Students learn about ethics, power, and government".

The changes required by the DS will not come about without effort. Part of these efforts can and should be educational. At the university level, *the Conference of University Rectors* (CRUE)<sup>1</sup> is no stranger to these approaches, recommending that Spanish universities work to promote [12] (p.3):

- "The adoption of a Declaration of Principles on Education for Sustainable Human Development adopted by the Governing Body of each university.
- The development and implementation of a sustainability assessment system linked to the institutional quality system.
- Research in Education for Sustainability.
- Teacher training actions that train teachers to include sustainability content in their subjects, consistent with the basic competencies specified in their teaching guides.
- Introducing procedures in line with the principles of sustainability and risk prevention into practical lessons learned.
- The inclusion of specific specialization pathways in sustainability for each degree.
- Noncurricular sustainability education actions that complement the training of the student, in the form of seminars, seminars, worktables, living labs, learning/service, etc. and that may have value in credits of supplement to the degree.
- Development of resources and materials to support the introduction of sustainability in the academic curriculum.
- The evaluation of final degree, master's, and doctoral thesis papers from a sustainability perspective, as well as a specific offer of a sustainability nature.
- Promote the coherence of activities to introduce sustainability into the academic curriculum with university life activities and campus management, granting the possibility of participation in decision-making and in actions that improve the quality and socio-environmental awareness of the university community.
- Social interaction mechanisms that enhance the role of the university in the achievement of Sustainable Human Development.
- Postgraduate studies in socio-environmental specialization and risk prevention.
- In this work we try to approach how the Degrees in Pedagogy are facing the challenge of educating their new graduates in the approaches of Sustainable Development. To this end, we analyze the documentation available on the websites of various Spanish universities regarding subjects directly linked to Sustainable Development".

In the light of the above, it is considered that an inclusive curriculum with a socio-cultural and inclusive approach, must contemplate content on sustainability. For this reason, the key objective of knowing the presence of contents related to sustainability in the curricula of the Spanish State Degree in Pedagogy was raised in this study, as well as the competencies they intend to develop in an inclusive educational framework.

## 2. Method

### 2.1. Participants

In this section, we analyze the presence in the degrees in Pedagogy of subjects that address Sustainable Development. To do this, we went to the QEDU website (What to Study and Where in the University: <https://www.educacion.gob.es/notasdecorte/compBdDo>) of the Ministry of Education, Culture and Sport of the Government of Spain, and we identified 22 degrees in Pedagogy in public universities and 5 in private universities (they really only appear on the corresponding websites or are taught in three). Consequently, we analyze 24 degrees in Pedagogy through the information that the different universities make available to the public on their websites.

After determining the grades to be analyzed, the study plans were analyzed. The first step was the localization of the subjects that in their denomination contained terms directly linked to the DS. As a result of this first selection, 10 subjects were obtained.

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<sup>1</sup> CRUE actions on sustainability are available at <http://www.crue.org/SITEPages/Crue-Sostenibilidad.aspx>

### 2.1.1. Selection of subjects

After obtaining the curricula available on the website of these 24 universities, a first analysis of the titles of the subjects was carried out. This analysis allowed the selection of subjects whose title contained one or more of the following terms: Sustainability, Development, Sustainable and Environmental. Ten subjects, five compulsory and five optional, were found in nine universities: Universidad Nacional de Educación a Distancia, Universidad de Granada, Universidad de Sevilla, Universidad de La Laguna, Universidad de Salamanca, Universidad Autónoma de Barcelona, Universidad de Santiago de Compostela, Universidad de las Islas Baleares and Universidad de Oviedo. Since the degree plans are in a continuous process of change following the rules established by ANECA, it seems more appropriate not to refer directly to the universities but to the subjects found (Table I). These subjects, for the most part, had an allocation of 6 ECTS, only one had a higher allocation, of 8 ECTS (Education and Sustainable Development). The majority of these subjects, 7 of the ten, were assigned to the area of Theory and History of Education (THE), of the other three, two were assigned to Didactics and School Organization (DSO) and another to the area of Special Didactics (SD). In the Spanish university, more traditional subjects are often clearly attached to the same areas of knowledge (the subject of Theory of Education to the area of Theory and History of Education, the subject of Didactics to the area of Didactics and School Organization, etc.) so this small variability in the allocation to different areas of knowledge has shown that sustainability can be addressed from different approaches.

With regard to the title of the subjects, similar use of the *Environmental and Sustainable labels* was found, so that five subjects used the term *sustainable* (*Sustainable development. Its educational implications; Education for peace and sustainability; Education and sustainable development; Education, Sustainability and Consumption; Education for Cooperation and Sustainable Human Development*) and four, *environmental* (*Environmental education; Environmental pedagogy (2); Environmental and intercultural pedagogy*), only one used both (*Environmental education and sustainability culture*). In reviewing them, it was found that under the label of Environmental Pedagogy and Environmental Education there were very similar topics that were addressed under the label of Sustainable. However, it was observed that the use of Sustainable appeared more clearly and unrelated to other terms in the case of two subjects (*Sustainable Development. Its Educational Implications and Education and Sustainable Development*).

With regard to the peculiarities of the subjects, it was observed that the majority was in the third year of the grade (6 out of 10), 2 of them in the last year and 2 in the second. On the other hand, half of them were compulsory and the other half optional.

Table I. Environmental, sustainable and sustainable presence in the Degrees of Pedagogy

Subject	Type**	Course	Semester	ECTS	Area
Sustainable Development. Its Educational Implications	CS	3	2	6	THE
Education for Peace and Sustainability	OS	3	1	6	THE
Environmental Education	OS	4	1	6	THE
Education and Sustainable Development	CS	3	2	8	THE
Environmental Pedagogy (1)*	CS	3	1	6	THE
Education, Sustainability and Consumption	OS	4	-	6	SD
Environmental Education and Sustainability Culture	CS	2	2	6	THE
Environmental Pedagogy (2)*	CS	2	2	6	DSO
Pedagogía Ambiental e Intercultural	OS	3	2	6	THE
Education for Cooperation and Sustainable Human Development	OS	3	1	6	DSO

\*These subjects belonged to different universities, but they have the same denomination, so we have proceeded to number them for their distinction. \*\* CS, compulsory subject and OS, optional subject.

## 2.2. Process

The programs of the selected subjects were analyzed in detail through the study of three essential elements to know the training that the subjects intend to provide: competencies, learning results, and contents. Competencies are thus the backbone of the European Higher Education Area (EHEA) and, in particular, of the European credit transfer system. The National Agency for Quality Assessment and Accreditation (ANECA) defines them as "the set of knowledge, skills, attitudes that are acquired or developed through coordinated training experiences, which are intended to achieve functional knowledge that efficiently responds to a task or problem in daily and working life that requires a teaching and learning process" [3] (p.20) and pays particular attention to its evaluation.

The Learning Results allow us to know "what the student is expected to know, understand and be able to do at the end of the corresponding academic unit" [2] (p.19). Therefore, if you want to know the training of university students, you have to analyze this dimension.

The content was studied as it constitutes closer evidence of the teaching-learning processes. The results of each of these phases of the investigation are detailed below.

### 2.2.1 Competencies and learning outcomes

For the analysis of the competencies and learning outcomes of the subjects, we have used the proposal [4] to which a new dimension was added: *Professional*. This dimension includes competencies dealing with professional issues (for example, managing and planning professional activity, initiative and motivation; planning and organization; proper time management, etc.) without explicit mention of the other dimensions indicated in the other categories (Table II).

The Sustainability Thesaurus [4] makes it possible to analyze documents by reflecting the priority themes contained in the Declaration of the Decade of Education for Sustainable Development [25]. This instrument established four dimensions: Sustainability (SOSTENIB), Socio-Cultural (SOCIOCLT), Environmental (AMBIN), and Economic (ECONM). The meaning of each dimension and the subcategories that constitute it are shown in Table II.

Table II. Categories taken from the Sustainability Thesaurus [4]

ACRONYMS FOR CATEGORIES	ACRONYMS FOR SUBCATEGORIES	MEANING OF THE ACRONYM
SUSTAINABILITY (Has no subcategories)		Sustainability: is a concept that includes the pursuit of environmental quality, social justice and an equitable and viable economy in the long term. It is assigned when the word Sustainability or derived (sustainable, sustainable, unsustainable, sustainable, etc.) is found. Also considered SOSTENB are those competencies that refer to the three perspectives (environmental, economic and social), although not expressly mentioned the word sustainability or analogous.
SOCIOCLT		Sociocultural Perspectives, includes the following subcategories:
	HUMRIGHT	Human rights: human rights of the three generations: a) democratic, civil and political; b) economic, social and cultural; c) solidarity
	GE	Gender equality. Non-discrimination on the basis of gender, defense of women's rights.
	CULTDIVERS	Cultural diversity, intercultural understanding and peace: cultural diversity, peace and human security. Multicultural society, intercultural education. Includes references to universal accessibility and design for all.
	HEALTH	Health: health promotion. Factors that determine healthy living standards. Disturbing physical and emotional condition. HIV/AIDS.
	GOVERN	Governance: Social democratization: transparency, free debates, freedom of opinion, citizen participation.
	ETHICS	Ethics: ethical responsibility, ethical principles, values
	DEMG	Demography: Changes, situation
	TICS	Access to TICS. Generalization of use; breaking the digital divide. (Only when quoted like this)
ENVIRONMNTAL		Environmental Outlook, includes the following subcategories:
	NATRESOURC	Natural resources: protection and sustainable use of natural resources indispensable for life.

ACRONYMS FOR CATEGORIES	ACRONYMS FOR SUBCATEGORIES	MEANING OF THE ACRONYM
	BIODV	Biodiversity and biological diversity
	ENERGY	Energy: use of renewable energy and energy efficiency.
	CC	Climate change: climate change associated with global warming; social pressure for effective measures (International agreements: Kyoto, UN Framework Convention, etc.).
	RD	Rural development: rural transformation, adaptation of investments and educational activity to the diversity and needs of rural situations.
	SUSTURB	Sustainable urbanization: sustainable urbanism, cities, threats and opportunities of new social, economic and environmental realities.
	ENVIRONISSUES	Environmental issues: global, regional and local. Disaster prevention and mitigation.
	CNENVIRONM	Conservation of the natural environment.
	HUMANINFLUENC	Human influence and intervention in the environment. Including chemical risk, biological or biotechnological risk, references to pollution and environmental policies.
ECONM		Economic Outlook, includes the following subcategories:
	PR	Poverty reduction: poverty reduction. Implementation of the level of training.
	CRACC	Corporate Responsibility and Accountability: Corporate Social Responsibility. Extension of Corporate Social Responsibility. and skills training for Sustainability.
	ME	Market economy: market economy. Harmonize market needs with environmental protection and the objective of social equity.
	RPC	Responsible production and consumption. Social and environmental effects of consumption habits.
	ENVIRONMIMP	Environmental impact: assess the environmental and social impact of economic activities.
	EM	Environmental management, economic impact of environmental management.

### 2.2.2 Contents

For the analysis of the contents, we proceeded to count in the contents of the subjects the presence of key terms of Education and DS directly related to sustainability, the dimensions of the DS: environmental education; environmental/eco (not preceded by education); socio-environmental/environment-culture; Human development; Citizenship/Citizen; development (not followed by sustainable, nor linked to educational planning); Economy; and dimensions necessary for SD such as Ethics/values/General Systems Theory/complexity; Glocal; Local; Agenda 21; and, School/educational agenda) and, finally, two aspects related to issues of educational intervention: strategy and profession.

## 3. Results

In the analysis carried out the generic and/or transversal competencies were mostly destined to the profession (PROF) and there were few references to DS or other similar dimensions.

### 3.1. Competencies

It is noteworthy that the competencies classified as Professional, being focused on the performance of the profession without explicit reference to sustainability, constitute 76.5% of the generic/cross-curricular competencies and 66.67% of the specific ones (Table III). On the other hand, the Economic dimension does not appear among the competencies while the Sociocultural dimension represents 14.2% of the generic competencies, through the presence of 4 of its 8 subcategories: Human Rights (DERHUM), Cultural Diversity (DIVCUL), Ethical Responsibility (ETICN) and Access to Information and Communication Technologies (ICT) and 7.14% of Specific Competencies in the percentages of two of its subcategories: DIVCUL and TICS. On the other hand, the Sustainability dimension had an incidence rate of 7.7% between generic competencies and 16.67% in specific competencies. The environmental dimension was poorly



represented. Of its 9 subcategories, only Environmental Problems (PROAM) stands out among the generic competencies, with a percentage of 1.6% and among the specific, 4.76% for the subcategory PROAM and for the Influence and Human Intervention in the Environment (INFHU).

Table III. Frequency of emergence of sustainability categories in subject competencies

<b>Generic/Transversal Competencies</b>								
<b>Subject</b>	<b>PROF</b>	<b>SOSTENB</b>	<b>RIGHTHU</b>	<b>CUTDIV</b>	<b>ETHIC</b>	<b>TICS</b>	<b>ENVISSU</b>	<b>HUMINF</b>
Sustainable Development. Its Educational Implications	2		1		1	1		
Education for Peace and Sustainability	2							
Environmental Education	4						1	
Education and Sustainable Development	4							
Environmental Pedagogy (1)	7				1			
Education, Sustainability and Consumption	1	3						
Environmental Education and Sustainability Culture	5							
Environmental Pedagogy (2)	8							
Environmental and Intercultural Pedagogy	6	1		1				
Education for Cooperation and Sustainable Human Development	10	1		3	1			
<i>Total</i>	49	5	1	4	3	1	1	
<i>Percentage</i>	76,5	7,7	1,6	6,3	4,7	1,6	1,6	0
<b>Specific Competencies</b>								
<b>Subject</b>	<b>PROF</b>	<b>SOSTENB</b>	<b>RIGHTHU</b>	<b>CUTDIV</b>	<b>ETHIC</b>	<b>TICS</b>	<b>ENVISSU</b>	<b>HUMINF</b>
Sustainable Development. Its Educational Implications	1							1
Education for Peace and Sustainability								
Environmental Education (1)	1	1					1	
Education and Sustainable Development	2						1	
Environmental Pedagogy (2)	7					1		
Education, Sustainability and Consumption	1	2						
Environmental Education and Sustainability Culture	2	4						1
Environmental Pedagogy	2							
Environmental and Intercultural Pedagogy	6			1				
Education for Cooperation and Sustainable Human Development	6					1		
<i>Total</i>	28	7		1		2	2	2
<i>Percentage</i>	66,67	16,67	0	2,38	0	4,76	4,76	4,76

### 3.2. Learning outcomes

Despite the importance of the definition [2] of learning outcomes, some universities did not have this information available on their websites at the time of this study, so it was impossible to analyze this dimension in all subjects. In the 6 subjects, if they offer learning results, they show the increase in frequency in several of the categories and, above all, the greater direct relationship of these with sustainability.

The frequency percentage of the Sustainability dimension is majority with 56%. On the other hand, the Professional dimension represent 16%, which is a significant decrease with respect to its representativeness among the competencies. The sociocultural dimension, through two of its eight categories, DERHUM and DIVCUL presents 16%. The Environmental dimension accounted for 12% in its PROAMB category. Again, the Economic dimension is absent.

Table IV. Frequency of occurrence of sustainability categories in subject learning outcomes

Subject	PROF	SOSTENB	RIGHTHU	CUTDIV	ENVISSU
Sustainable Development. Its Educational Implications		4			
Education for Peace and Sustainability		4			
Education and Sustainable Development		3			
Education, Sustainability and Consumption		2			2
Environmental and Intercultural Pedagogy	3	1		1	1
Education for Cooperation and Sustainable Human Development	1		2	1	
<i>Total</i>	4	14	2	2	3
<i>Percentage</i>	16	56	8	8	12

### 3.3. Contents

Table V shows that the Profession was one of the least used terms, accounting for only 3.79%. On the other hand, the most used term is that of Environmental Education, representing 24.24% of the sample analyzed, followed by Sustainability (15.90%) and Environmental (15.2%); already very distant, there is Development (7.58%). Although it is true that the presence of Environmental Education was located, in large part, in a single subject where this concept appears 17 times (which represents 53% of the occurrence of this category). In the other subjects, the distribution is less numerous: 7 in *Environmental Pedagogy* (2), 4 in *Environmental Education and Sustainability Culture*, 2 in *Education and Sustainable Development*, one in *Environmental Education and Education, Sustainability and Consumption*, and not once in the rest. The Environmental and Eco concepts are not used in the contents of Sustainable Development and Education for Cooperation and Sustainable Human Development. The other subjects include these concepts, but the use that is made in *Environmental Pedagogy* stands out where it appears on 10 occasions. Regarding sustainability, the subject of *Environmental Education and Environmental and Intercultural Pedagogy* do not use the terms sustainability or sustainable.

After these concepts, the presence of other categories begins to be reduced as the results showed. Thus, the concepts of Socio-environmental, Human Development, and Citizenship are rare although we can consider them linked to the social dimension of SD. It is possible that this is due to the existence of other subjects where the social dimension, above all, linked to international cooperation, solidarity, and citizenship, already appear collected.



Table 5. Frequency of occurrence of sustainability categories in subject contents

Subject	Sustainable/ sustainability	Environment Education	Environment (not preceded by educational))	Eco	Partner- environmental Environmental -Cultural	Human development	Citizenship /citizen	Development	Economy	Ethics/ Values	TGS/ Complexity	Global	Glocal	Local	Agenda 21	School agenda /educational	Strategy	profession
Sustainable Development. Its Educational Implications	3	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	1	0
Education for Peace and Sustainability	2	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Environmental Education(1)	0	1	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Education and Sustainable development	3	2	1	0	3	5	1	5	1	1	2	3	0	0	0	0	0	0
Environmental Pedagogy (2)	1	17	8	2	1	0	1	0	0	1	0	0	0	0	1	1	1	2
Education, Sustainability and Consumption	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Environmental Education and Sustainability Culture	2	4	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
Environmental Pedagogy	1	7	3	0	1	0	0	0	0	0	0	1	0	1	1	1	0	0
Environmental and Intercultural Pedagogy	0	0	2	0	3	0	0	0	0	0	1	0	0	0	0	0	0	0

Subject	Sustainable/ sustainability	Environment Education	Environment (not preceded by educational))	Eco	Partner- environmental Environmental -Cultural	Human development	Citizenship /citizen	Development	Economy	Ethics/ Values	TGS/ Complexity	Global	Glocal	Local	Agenda 21	School agenda /educational	Strategy	profession
Education for Cooperation and Sustainable Human Development	1	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0
Total	21	32	20	4	8	6	3	10	2	3	3	5	1	1	2	3	3	5
Percentage	15,9	24,2	15,2	3,0	6,1	4,5	2,3	7,6	1,5	2,3	2,3	3,8	0,8	0,8	1,5	2,3	2,3	3,8

#### 4. Discussion

He highlighted from our research that in an emergency situation following the establishment, first, of the Millennium Development Goals (MDGs) and later, of the Sustainable Development Goals (SDGs) as well as [the commitment of the United Nations Decade for Education for Sustainable Development](#), the presence of subjects directly linked to the SD was scarce. On the other hand, the fact that half of the subjects found were optional, does not allow to be optimistic about the incorporation of specific training that addresses sustainability in the training of future pedagogues.

This reality leads us to reflect on the little importance that the DS has in university education [5] [20] and that, despite the fact that the training of university graduates is or should be the object of special care in this field because graduates have the opportunity to generate real changes in the adult world, not just work, that favor DS.

*With respect to competencies*, most of them were in the *Professional* dimension since, in the current context, the presence of directly linked competencies was prioritized when making the profession. The competencies belonging to the dimensions *Sustainability*, *Sociocultural* and *Environmental* were scarce if they are compared with the *Professional* dimension or null for the *Economic* dimension. In this regard, we note that the analyses carried out on competencies did not clearly indicate whether or not the SD was included in the exercise of the profession itself. That is, why should we assume that professional competencies such as *Identify educational approaches and problems, inquire about them: obtain, record, and interpret relevant information to make reasoned judgments that allow improving educational practice*, are detached from or linked to the DS.? We have no way of knowing it, and further study is needed, but it seems difficult to argue that the university context, which has barely incorporated the discourse of sustainability, is reorienting the training of new professionals towards such sustainability [13]. It therefore, seems appropriate to insist that it is pointless to consider a profession, in particular, that of the pedagogue, without a clear involvement in sustainability [9].

The absence or low presence of the term sustainability and the high presence of the term environment can be considered as indicators of a more focused orientation on the environmental dimension of Sustainable Development or an indicator of the weight of tradition widely rooted in the area of Theory and History of Education in the field of Environmental Education [6].

The analysis of learning outcomes has shown a greater link with dimensions linked to sustainability than the study of competencies. This is most likely due to the fact that, by their very nature, competencies are drafted in a more homogeneous manner. In addition to the requirements of the evaluation processes linked to ANECA. On the other hand, the greater presence of dimensions of sustainability, although in a very unequal way, learning outcomes can be taken as a good indicator that the selected subjects are integrating the sustainable perspective by identifying it as a result of student learning.

The study of the contents shows an important presence of thematic topics about the DS and, on the contrary, very few regarding the profession. This result is very interesting when compared to the presence of the professional dimension in competencies and learning outcomes. And it reinforces the need to review the professional perspective. Although the contents have great diversity, they appear as central those of sustainability, environmental and environmental education being very distant terms linked to socio-cultural elements (citizenship, human development, Ethics, etc.) and economic.

This study has shown the predominance of professional competencies (76.5% in generic and 66.67% in specific competencies) and how this domain is lost when addressing learning outcomes (16%) and content (3.79%). This could favor the idea that the training of pedagogues is far from the perspective of sustainability. Consequently, if we want to link Sustainable Development with university education at the level of Pedagogy, it must be guaranteed, without ambiguity, the main focus of vocational training is on sustainability from an inclusive socio-cultural approach.

On the other hand, it seems that, compared to other areas, the area of Theory and History of Education has clearly opted to focus its teaching on the theme of Sustainable Development. However, it is to be hoped that in the face of the growing commitment of universities (Crue-Sustainability Sectoral Commission) and the State in general, but especially of the education system, discourses, norms, and educational practices linked to sustainability will

increase [17]. This will involve a double effort: The first to conserve and increase the presence of subjects directly linked to Sustainable Development, subjects that should address the essential dimensions of sustainability, thus avoiding the biases that have been found in this study pointed out by the weakness of the dimensions related to Sustainable Development and, in particular, the total absence of the Economic dimension. The second involves linking professional skills with sustainability.

In this sense, it is necessary to recognize that it would be beneficial to work from different disciplines for Sustainable Development in school, in the university and in society. However, in the university, and in the configuration of curricula, it is quite possible that the question of ascription to areas of knowledge will be resolved by plots of power and not by a broader perspective taking, for example, multidimensional thinking [18] as a starting point and focus the education of university students on understanding and effective action on reality. A good mirror to know what will happen can be the study of what happened with other topics such as family, values, educational policy, interculturality, or inclusive culture.

In short, we believe that only through education for sustainability and inclusion will we be in a position, as it would indicate [25] (p.67) "to lead the kind of life they consider valuable and increase their real choice".

## 5. Conclusions

In the current task of rethinking a curriculum for all, it seems necessary to make explicit the framework of values that underpins inclusive education, among which sustainability occupies a key place. Hence, the importance of having a set of questions and indicators on a socio-cultural and inclusive framework in addressing sustainable development is considered.

This exploratory study identified subjects directly related to sustainability that were analyzed through the qualitative data analysis program Atlas-ti. The results showed, on the one hand, the low presence in these grades of subjects whose name was directly linked to sustainability, and, on the other hand, the presence of professional competencies that were not subsequently specified in the corresponding learning outcomes or in the training content was detected.

We conclude with a call to review the contents related to the training of future pedagogues since it is essential to intensify training related to sustainability in an inclusive education framework.

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