# Gender competences in undergraduate studies in Spanish public universities. Case study of the University of Seville.

## Methodology

This research analyses how European standards have been transferred to the teaching programmes of a Spanish university with more than 60,000 students, the University of Seville (US), the third largest in Spain. A content analysis of 4,643 undergraduate degree programmes has been carried out for all branches of knowledge.

## **Purpose**

Accordingly, the objective is to perform a diagnosis on the inclusion of gender skills in all of its official degree programmes, for the purpose of drafting a best practices guide that may serve as motivation to include mainstreaming and specific skills in 'teaching practice'.

## **Findings**

We have established the scant presence of the gender perspective in the teaching projects of the US. Over 80 per cent of them do not comply with the regulations in this regard. Our second hypothesis, namely, that there are differences between fields of knowledge when complying with the mandatory transversal application of the gender perspective, has also been substantiated. This is especially the case in the natural sciences and engineering and architecture.

## **Originality**

The results illustrate the little echo(?) of the regulations in the teaching projects and the existence of important differences when it comes to the gender perspective according to the branches of knowledge. This is the first research to carry out a study of this nature in all the degrees taught at a university and provides evidence of the need to modify equality policies in the university environment.

## 1. Introduction

The existence of applicable legislation does not always mean that it is enforced. University education and gender combine two universes relating to education and the social realm. There has been a deluge of mandatory legal requirements, stipulated by both the European Union and universities themselves, in both spheres over the past decade. With a clear socioeducational objective, Constitutional Act 3/2007 of 22 March for Effective Equality between Women and Men, and Constitutional Act 4/2007 (March and April), amending the previous Act 6/2001 on Spanish Universities, created the framework for the European Higher Education Area (EHEA), which has laid the foundations for the new higher education studies for acquiring skills. This model gives priority to equality between men and women, as does the Spanish Constitution, the bylaws of the country's different autonomous communities and the internal regulations of its universities. One such measure—Constitutional Act 14/2011, of 1 June, on Science, Technology and Innovation—envisaging the introduction of

gender mainstreaming, deals with compliance with equality legislation in the degree verification reports of Spanish universities. Similarly, at the regional level, Law 12/2007, for the promotion of gender equality in Andalusia (the region in which the university analysed is located), and Legislative Decree 1/2013, approving the Consolidated Text of the Andalusian Law on Universities, are regional reference standards on these matters.

The university gender/equality binomial has obliged the scientific community to address this matter and to put forward proposals for moving forward in a number of aspects, including the following: glass ceilings and velvet ghettos (Cline et al., 1986); gender violence and sexual harassment in the workplace; the inclusion of female university professors in managerial positions; the numerical representation of female students and their academic performance in relation to their male counterparts; the representation of women in research and teaching by field of knowledge; networks and publication channels for female researchers; the creation of units responsible for gender equality in chancellor's offices, etc. These issues are being researched in Spain and the rest of the world (Howie and Tauchert, 2019; Lörz and Mühleck, 2019; Aktas et al., 2019), for even in developed countries with legislations that respect civil liberties, inequality continues to be an issue in higher education. As Castaño has stated as regards management, the new public management currently being practised at European universities promotes mainstreaming and diversity as the basis for equality policies, which nevertheless 'are grounded in quantitative success metrics, while [...] equality has been reduced to a numerical illusion and the myth of free choice to justify gender inequalities' (2016: 238). The conclusions of researchers demonstrate that this is a current concern at Spanish universities (García Sáinz, 2017), albeit more for women, and that progress in this regard has been just as slow in Europe as a whole. Despite being a governmental concern, as reflected in the reports of the European Commission (2011), universities are still resisting change (Verge et al., 2018).

Pastor and Acosta emphasise how difficult it is to reduce the gender labour gap at Spanish universities, notwithstanding the measures that have recently been adopted, plus the need to 'de-gender' science to forge ahead (2016: 268). Women account for 48% of researchers in Spain, but only 16% are rectors, and 21% are professors (Ansede, 2019). The illusion of equality, which is still sketchy, can be seen in the growing number of women in managerial positions and in research, but there are essential areas that should be addressed to achieve real equality in academia, such as the curriculum, and not only who teaches it. Indeed, this approach is difficult to find in the equality programmes of public universities, in which many of the initiatives are nothing more than fine words, without any guarantee that they will be implemented (Pastor et al., 2020). The studies published to date demonstrate that in some fields of knowledge and disciplines what is still considered as teaching innovation (Vega et al., 2018; Aguilera et al., 2019) should now be routine. The largest number of studies have been performed on degree programmes, fields of knowledge and subjects (Guarinos et al., 2018; Ortega and Pagés, 2018; García-Ramos et al. 2020). Some universities have taken action and, in addition to diagnosing the presence of skills, have assessed their results, as has been the case with Vizcarra et al. (2015) and Aguilar (2015). There is even now talk of how urgent it is to adopt measures in subject programmes and projects in fields such as the health sciences, in which there is currently the highest degree of commitment in Spain. (Ruiz-Cantero et al., 2019). Learning of excellence, namely, learning from those with the best track record (Canada, the United States, Holland and the

United Kingdom), is recommended. The need for gender mainstreaming in higher education, both in the social and natural sciences, is a social imperative today. Only through this action will it be possible to train adult professionals capable of closing the gender gap and changing the game rules (Morley, 2013; Vázquez-Cupeiro, 2015).

## 2. Objectives

The few scientific studies that have hitherto analysed the results of the introduction of skills at Spanish universities have confirmed that 'mainstreaming as a teaching strategy as regards gender issues has yielded scant results' (Asián et al., 2015: 41), i.e., the use of gender-sensitive learning as a strategy that cuts across the content of all subjects, owing to the lack of knowledge and awareness of teaching staff. Accordingly, this study focuses on a Spanish public university, that of Seville, and, specifically, on the following research question: what is the current situation of mainstreaming and specificity in this regard at a university with over 60,000 students? Accordingly, the objective is to perform a diagnosis on the inclusion of gender skills in all of its official degree programmes, for the purpose of drafting a best practices guide that may serve as motivation to include mainstreaming and specific skills in 'teaching practice'.

It is necessary to review how these skills are included in the subject and degree programmes of different fields of knowledge, and to identify what type of subjects they are, the quantitative and qualitative inclusion of mainstreaming content or skills, and the challenges that these pose. Accordingly, this study focuses on undergraduate degree programmes, insofar as it is considered that what is involved is Level 2 of the Spanish Qualifications Framework for Higher Education (MECES), to wit, the basic university level.

The University of Navarre (Fernández Viguera, 2011) and the University of Cadiz (Menéndez, 2018) are the only two Spanish universities that have performed comprehensive reviews to date. The results of this last review reveal that 49 per cent of the degree programmes have a gender perspective, but only 8 per cent of the subjects include gender content or skills, the field of health sciences being the most explicit in this regard, followed by the social sciences and the arts and humanities, while being non-existent in the natural sciences, engineering and architecture. Precisely, 0.2 per cent are specific gender subjects, 7 per cent include the gender perspective, 5 per cent are susceptible to including the gender perspective and 88 per cent do not refer to the concept whatsoever.

With the aim of confirming whether or not they include the mandatory gender skills, 67 degree verification reports and over 21 national and 12 international double degree programmes, taught at a total of 25 of the University of Seville's (US) centres and five associated ones, were examined. Grouped by field of knowledge, these verification reports have confirmed the following: the inclusion of transversal skills in all of the arts and humanities (with the same text: 'To foster and guarantee respect for human rights and the principles of universal accessibility, equality and non-discrimination and the democratic values of a culture of peace'; except for philosophy and archaeology, which are more explicit

in this respect). Mainstreaming appears to a lesser extent in the health sciences and only in nursing are specific skills developed. In the social sciences and law these skills are formulated in a variety of ways, but always as general skills, and only specifically so in anthropology. In the natural sciences they appear as general ones in a standard paragraph, as in engineering and architecture, with two undergraduate degree programmes (electronic engineering, robotics and mechatronics, and industrial chemical engineering) that neither include such a paragraph nor any other, thus failing to comply with the regulations vis-à-vis gender and/or equality. Despite being mandatory, the difficulties in applying and developing mainstreaming in the lecture hall is an undisputed fact (Bosch et al. 2011; Castellsagué et al., 2014; Menéndez, 2014). This has led to a regression, inasmuch as 'the incorporation of specific modules in degree programmes, which had been promoted to a certain extent in the former undergraduate and Bachelor's degree programmes, has declined with the incorporation of the new undergraduate curricula' (Menéndez, 2014: 53), because they have been included as general skills and because their introduction in teaching programmes and projects has floundered.

In this context, the initial hypotheses are as follows:

- The majority of the US's teaching programmes do not include a gender perspective.
- There are differences depending on the field of knowledge when applying this mandatory mainstreaming.

Accordingly, this study has three specific objectives:

- 1. To determine whether or not the institutional initiatives aimed at developing the gender perspective at Spanish universities have had an impact on undergraduate teaching projects at the US.
- 2. To establish a typology according to the presence of the gender perspective in those projects.
- 3. To establish a pyramid of presence in terms of the fields of knowledge covered by those projects.

## 3. Methodology and corpus

To meet the aforementioned objectives, a content analysis was performed on all the teaching projects (a more developed version of the programme, specific for each group/teacher) relating to the 88 undergraduate degree programmes taught at the US during the academic year 2018/2019. The projects were downloaded in pdf. format from the university's official website. Totalling 4,643, they were all in force during the aforementioned academic year (see Table I). As some of the projects belonging to the same subjects could be identical, those of the same length were compared and the identical ones were eliminated. After coding, the projects with the same number of codes were contrasted and those that were equivalent were also eliminated. The filtering of source documents resulted in a total of 3,131 teaching projects, which are shown in Table I listed by field of knowledge.

#### Insert Table I.

After introducing the teaching projects as source documents in the qualitative data analysis programme Atlas.ti, they were renamed and grouped in different families so as to facilitate their analysis by field of knowledge and degree programme.

The procedure described by Guarinos et al. (2018) was followed for coding the projects. In order to identify references to gender, 20 projects chosen at random were carefully read, before retrieving the keywords. Among the keywords detected, we included "LBGTI", "Queer" and "Patriarchy" as they repeatedly appear in publications related to gender studies. Automatic coding was performed using the 'prerequisite statement' function to avoid confusion with homonyms. Automatic coding allows for assigning labels to words, phrases, paragraphs and documents containing specific terms. In this study, the phrase was selected as the unit of analysis. The keywords detected and employed for coding are shown in Table II.

#### Insert Table II.

To tally the codes and to avoid duplications other new ones were created. Two keywords, for example, 'equality and gender' could appear in the coded phrases, thus duplicating the references. Accordingly, Boolean searches were performed to exclude those codes appearing in the same phrase. For instance, if the phrase 'gender equality' were coded, this would result in two codes 'equality' and 'gender'. To avoid double counts, a new one was created employing the Boolean search and indicating that in the case of the code 'gender', only those coded phrases containing 'gender', but not 'equality', should be included. The same procedure was employed in the case of 'women': it was established that the phrase should contain 'women', but neither 'equality' nor 'gender'. This was repeated with the five codes used. The order followed is shown in the first column of Table II.

## 4. Results

When analysing the coded teaching projects, two aspects stood out:

- 1. There were important differences depending on the field of knowledge.
- 2. In some fields of knowledge there were specific subjects addressing the gender perspective which, in some cases, involved up to 65 per cent of the codes of the field of knowledge in question.

It was therefore decided to perform an analysis by field of knowledge, without taking into consideration the specific subjects containing a high number of codes, in order that the comparison between fields of knowledge should be more realistic. The excluded subjects were as follows:

- 'Gender Studies in Communication' in the social sciences.
- 'Gender Literature and Minorities', 'Gender and English Literature', 'Arabic Literature Written by Women', 'Gender and Family in Eastern Asia' and 'Feminist Thought' (this

subject contained 187 codes, due to its extensive bibliography of more than 30 pages) in the arts and humanities.

• 'Gender and Health' in the health sciences.

## 4.1. By the appearance of gender references

To present the results, the existence or not of the gender perspective in the teaching projects will first be addressed, followed by those for each field of knowledge.

## 4.1.1. Teaching projects without gender references

The first analysis involved differentiating between those projects containing gender references and those that did not (with or without codes). The most striking finding is that in 81.4 per cent of the projects neither is there any reference to the gender perspective, nor do they even include the mandatory transversal skills. By field of knowledge, the natural sciences is the one with the lowest number of references (only 5.7 per cent) and the social sciences and law that with the highest (29.8 per cent). The number of projects analysed by field of knowledge and those that do not contain any codes are shown in Table III.

#### Insert Table III.

In Graph 1 it is possible to observe the differences between the fields of knowledge that prompted us to perform an independent comparative analysis.

## Insert Graph 1.

It is evident that the gender topic is an object of study in the social sciences and law, as well as in the arts and humanities. Be that as it may, in this study the focus was not only placed on module content, but also on the analysis of the objectives and skills that they developed, and so as to be included as projects 'with gender references' they only had to mention some of the (gender-related) search terms.

## 4.1.2. Projects with gender references

A total of 1,071 coded phrases corresponding to the five codes distributed in 583 teaching projects with gender references were obtained. When analysing the data (see Table IV), it is possible to observe the predominance of those references containing the term 'equality', appearing in all those teaching projects that include the transversal skills recommended by the Spanish Universities Act. At any rate, it should be recalled that the duplication of references was avoided in order that those that were already included in a code did not appear in the following one.

#### Insert Table IV.

The following graph shows the percentage of each code on the total by field of knowledge.

## Insert Graph 2.

## 4.2. Fields of knowledge

The presence of each code by field of knowledge in some of the most critical sections in which the teaching projects are organised - 'Objectives and skills' (what knowledge and skills the students should acquire), 'Content' (a theoretical-practical set of the subject taught) and 'Bibliography' (scientific literature and recommended or compulsory reading manuals) - will now be analysed.

#### 4.2.1. Social sciences and law

The study of the gender perspective is inherent to the social sciences and law. Thus, it is reasonable to expect a high presence of these codes in sections such as 'Objectives and skills', 'Content' and 'Bibliography'. In this field of knowledge there are 252 coded projects, with an average of 2.64 codes per project (for their frequencies, see Table V).

#### Insert Table V.

Similarly, the distribution of the codes in the different sections of the teaching projects are shown in Table VI.

#### Insert Table VI.

The presence of each one of these codes in each of the sections of the teaching projects will now be examined below.

## **EQUALITY**

## Objectives and skills

This code appears above all in 'Objectives and skills' sections, specifically as a generic objective. The drafting of sections in which this objective appears is not standardised, for which reason some of the paragraphs contained in the teaching projects are identical, while the teaching staff have added other different ones.

#### Content

In law, although many of the coded teaching projects mentioned social inequality without any specific reference to gender, in the majority of cases it was decided to maintain them because it was believed that they addressed gender inequality in some way or another. Accordingly, some subjects contain entire sections or sub-sections dealing with equality.

## Bibliography

The teaching projects contain 31 bibliographic references that include the term 'equality' in relation to gender.

#### **GENDER**

## Objectives and skills

The most frequently cited objective (37 per cent of the total) appears in the teaching project of the Social and Cultural Anthropology undergraduate degree course:

- 'E08. To recognise and analyse the relationships of domination as to class, gender, interethnicity, racism and age, which generate social exclusion dynamics.'

#### Content

There are subjects that include entire sections devoted to addressing the subject matter from a gender perspective. This is the case with 'Sociology of Labour and Companies', 'Sociology of Tourism' and 'Adapted Sports for Diversity'.

## Bibliography

There are 26 bibliographic references among the 161 gender-related codes.

#### **WOMEN**

The code 'women' appears primarily in content sections. It should be recalled that, although it appears in other phrases, double counts were avoided.

## Objectives and skills

Only one objective not appearing in the previous sections has been detected, namely, in the teaching project of the 'Ethnology of Latin America' subject.

#### Content

The rest of the codes appear in the content of sections specifically addressing the gender perspective of subjects like 'Basic Sociological Processes in Education' and 'Historical Legal Institutions'.

## Bibliography

The highest number of references are to be found in the bibliographies, with 57 publications relating to the gender perspective and including the term 'women'.

## **FEMINISM**

There are 17 codes, the majority of them in the content sections of the teaching projects, examples including subjects such as 'Anthropology of Sexuality' and 'Ethnography of Black Africa'.

#### **FEMININE**

There are 10 references to this code in the bibliographies and four in the content sections of the 'Myths and Imaginary of Audio-visual Culture' and 'Introduction to Criminology'.

#### 4.2.2. Arts and humanities

In the arts and humanities, 77.9 per cent of the teaching projects do not include any reference to the gender perspective.

As already noted in the methodology section, in this field of knowledge there are five subjects that specifically address gender issues that have not been analysed. The average number of references to the code 'gender' per project is 1.78.

The relevance and frequency of the codes can be observed in Table VII.

#### Insert Table VII.

As with the social sciences and law, the gender perspective is an object of study in the arts and humanities, as can be seen in the five specific subjects and in the number of codes per teaching project, indicating that they include more than a mere list of objectives and skills.

The distribution of the codes in the different sections of the teaching projects in shown in Table VIII.

#### **Insert Table VIII.**

The presence of each one of these codes in all the sections of the teaching projects is analysed below.

## **EQUALITY**

The most frequent code is 'equality', accounting for 43 per cent of the total. Focusing on its distribution in the different sections of the teaching projects, it can be observed that it is basically to be found in 'Objectives and skills'.

## Objectives and skills

The most frequent is the generic skill recommended by the administration, as has been seen in the social sciences and law (with 54 teaching projects).

#### Content

Content is presented in specific sections of the teaching projects of subjects like 'Fundamentals of Political Philosophy' and 'Current Ethical Theory and Issues'.

## **WOMEN**

The second most frequent code is 'women', representing 21.5 per cent of the total. This term is to be largely found in bibliographies (it is important not to forget that the previous codes excluded the following one, that is, in those references in which the codes 'equality' and 'women' appeared, the former was chosen).

#### Content

With respect to content, in the teaching projects there are topics aimed at analysing the role of women appearing in different subjects including 'Islamic Institutions' and 'Cultural Studies in English II'.

## Bibliography

Noteworthy is the case of the 'Medieval Spanish Literature' subject which, even though there is no mention of gender in the rest of the teaching project, does indeed contain six bibliographic references that analyse the role of women during that age.

#### **GENDER**

This code, accounting for 16 per cent of the total, is to be mainly found in the content sections of the teaching projects, albeit very equally distributed in the three sections analysed here.

## Objectives and skills

The gender-related objectives and skills included in this field of knowledge are specific. Some include a paragraph referring to non-sexist language.

#### Content

The subjects tend to include specific sections addressing the gender perspective in the subject matter, for instance, 'Painting Strategy' and 'Theatre in English I'.

#### **FEMINISM**

Accounting for 13 per cent of the total, this code basically appears in the content sections of the teaching projects.

#### Content

There are topics relating to critical theoretical perspectives covered in subjects like 'Expository Discourses and Art Dissemination' and 'Current German Literary Theory'.

The bibliographies are linked to the teaching projects developing this type of content.

#### **FEMININE**

There are four references, two in content sections and two in bibliographies.

The references found in content sections are included in subjects like 'French' and 'Contemporary Scripts of Eastern Asia'.

#### 4.2.3. Engineering and architecture

In this field of knowledge, the gender perspective is infrequent. Specifically, 89.6 per cent of the teaching projects do not include any of the codes analysed here. The average number of codes in those that do indeed mention gender is 1.05.

The distribution of the codes in the different sections of the teaching projects is shown in Table IX.

#### Insert Table IX.

The presence of each one of these codes in all the sections of the teaching projects will now be analysed below.

#### Insert Table X.

#### **EQUALITY**

This code accounts for 93 per cent of the total in this field of knowledge.

Objectives and skills

All the references, barring two, refer to the general objectives and skills appearing in the teaching projects of the other fields of knowledge.

#### Content

The sole reference in the content sections of the teaching projects appears in the 'Fundamentals of Architecture' subject.

Bibliography

Similarly, there is only one reference in the bibliography of the 'Architectural History, Theory and Compositions' subject.

#### **GENDER**

The term 'gender' appears five times in the content sections of the teaching projects and only once in the bibliography.

With respect to the content sections, it appears in the 'Urban Development and Projects' subject, while the bibliographic reference is included in the 'Architectural History, Theory and Compositions' subject.

#### WOMEN

The code 'women' appears three times: twice in the bibliography and once in the content section of the 'Architecture Workshop' subject.

## **FEMININE**

The only reference to this code in the teaching projects appears in the content section of the 'Fundamentals of Architecture' subject.

#### 4.2.4. Health sciences

As to the teaching projects in the field of knowledge of the health sciences, 78.9 per cent of them do not contain any reference to the gender-related codes. As the 'Gender and Health' subject accounted for over a third of the references, it was decided to eliminate this teaching project from the corpus, in keeping with the criterion followed in the previous analyses. With an average of 1.15 codes per teaching project, there are only references to 'equality' and 'gender' (see Table XI).

#### Insert Table XI.

Table XII shows the distribution of the two codes in the different sections of the teaching projects.

#### Insert Table XII.

The presence of these two codes in each one of the sections of the teaching projects is analysed below.

## **EQUALITY**

This code largely appears in the objectives and skills sections of the teaching projects.

## Objectives and skills

The most frequent code is 'equality' (41 teaching projects) basically because a reference to the skill recommended by the public administration is included.

Other specific objectives and skills appear in subjects such as 'Eye Care' and 'Development and Intervention Contexts'.

#### Content

With respect to the content sections of the teaching projects, there are references fundamentally to equality (inequality) as a whole, but which is understood here as encompassing gender.

## **GENDER**

The distribution of the code 'gender' by teaching project section is as follows: ten in objectives and skills; eight in content; and six in bibliography. Furthermore, there are also references to this code in two other less important sections, namely, methodology and grades, with one apiece.

## Objectives and skills

The most frequent objective containing the code 'gender' is:

- 'To individualise care considering age, gender, cultural differences, ethnic group, beliefs and values' ('Clinical Nursing' and 'Bioethical Issues').

There are several variations on the theme. More specific objectives and skills can be found in subjects such as 'Ethics and Management in Nursing', 'Adolescence and Risk' and Forensic Dentistry'.

#### Content

Gender is developed in the content sections of the teaching projects with comprehensive subject matter in the following subjects: 'Adolescence and Risk', 'Epidemiology and Public Health' and 'Development Psychology in Infancy'.

## Methodology

In the teaching project of the 'Psychology and Communication' subject, the following reference to gender appears in the methodology section.

#### Assessment

Lastly, the need to pay attention to gender identity disorders is mentioned in the teaching project of the 'Infant-Juvenile Psychopathology and Assessment' subject.

#### 4.2.5. Natural sciences

The natural sciences is the field of knowledge in which gender-related codes are few and far between. Specifically, they are conspicuous by their absence in 94.3 per cent of the teaching projects. Indeed, there are only 14 projects that include the gender perspective, a ratio of 1:21.

The only code that appears 17 times is 'equality' under 'objectives and skills'.

## 5. Conclusions

Our first conclusion is that the two initial hypotheses have been borne out.

Although Constitutional Act 1/2004 on Integrated Protection Measures against Gender Violence states that 'in all academic spheres universities shall include and foster the study of gender mainstreaming in training, teaching and research on gender equality and non-discrimination in a transversal manner', we have verified that this is patchy in practice.

In this connection, we have established the scant presence of the gender perspective in the teaching projects of the US. Over 80 per cent of them do not comply with the regulations in this regard. Our second hypothesis, namely, that there are differences between fields of knowledge when complying with the mandatory transversal application of the gender perspective, has also been substantiated. This is especially the case in the natural sciences and engineering and architecture.

In light of the analysis of the teaching projects with gender references (see Graph 3), we can conclude that in the cases of the natural sciences, engineering and architecture the presence of gender-related codes is all but limited to their objectives and skills sections.

## Insert Graph 3.

In the natural sciences, engineering and architecture, the inclusion of the gender perspective is more a case of legal inertia or imitation, focusing chiefly on objectives and skills, without developing the concept in specific gender-related content or bibliography. As can be seen in Graph 3, it is striking that the presence of mainstreaming is limited to an objective which is not qualitatively developed in the content sections or bibliographies of the teaching projects.

In engineering and architecture, these are some subjects that at least develop specific content dealing with gender and include gender-specific bibliographies. The ratio between the objectives and skills sections and the rest is 92:8.

As regards the health sciences, in which it should be recalled that there is a specific subject, 'Gender and Health', there are other subjects that include objectives and skills in content sections and bibliographies. The ratio between the objectives and skills sections and the rest is 60:29.

In the social sciences, law and the arts and humanities, the ratio between the objectives and skills sections and the rest is 44:56, which implies that the former have a greater presence in content sections (even more so in the case of the social sciences and law) and bibliographies. Therefore, we can contend that many subjects have been adapted simply for the sake of compliance (Guarinos et al., 2018).

The existence of subjects that have been adapted for the sake of compliance (i.e. including gender-related content, without it being a specific topic of the subject matter that might or might not be addressed) in all the fields of knowledge, except for the natural sciences, has led us to assume that this issue does not correspond so much to an affinity with or possibility of including mainstreaming as to the intention of lecturers to address the gender perspective or not. This reaffirms that any subject, curriculum or teaching project could incorporate the gender perspective. Accordingly, the presence of specific objectives or skills as opposed to generic ones is important, which would result in their incorporation in both content sections and bibliographies, thus facilitating a more real than rhetorical mainstreaming.

## 6. Study limitations and recommendations

As noted in the methodology section, our study's principal limitation is that it involves a purely quantitative and semantic analysis. Consequently, it has not allowed us to know what is really happening in the subjects inside and outside the lecture hall. To this end, it would be necessary to perform a qualitative analysis, based on student and lecturer surveys or on more in-depth case studies of specific subjects.

As to the recommendations deriving from our results and conclusions, they can be summarised as follows:

- There is a need to standardise the introduction of equality- and gender-related skills and objectives in teaching projects.
- It is essential to train teaching staff to develop specific gender-related skills.
- Specific programmes should be developed in each field of knowledge and even area to show lecturers how to apply gender mainstreaming in the subjects that they teach.

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Table I. Teaching projects analysed

Fields of Knowledge	Downloaded projects	Debugged projects	Difference
Arts and humanities (AH)	797	569	228
Natural sciences (NS)	352	245	107
Health sciences (HS)	626	403	223
Social sciences and law (SS)	1318	846	472
Engineering and architecture (EA)	1550	1068	482
	4643	3131	1512

Table II. Codes and search terms

Code	Search terms
Igualdad	Igualdad, equality
Género	Género, gender
Mujeres	Mujer, mujeres, woman, women
Feminismo	Feminismo, feminista, feministas, feminism, feminist
Femenino	Femenino, femeninos, female
Queer	queer
Patriarcado	patriarcado, patriarcal, patriarchy
LGTB	LGTB, LBGTI

Table III. Frequency of projects without reference to gender by field of knowledge

Field	Total projects	Projects without codes
SS	846	594
AH	569	443
HS	403	318
EA	1068	962
NS	245	231
TOTAL	3131	2548

Table IV. Codes by fields of knowledge

Code	SS	AH	EA	HS	NS	Total row
Equality	355	93	104	64	17	633
Gender	156	35	4	34	0	229
Women	71	46	10	0	0	127
Feminism	18	27	0	1	0	46
Feminine	14	7	1	0	0	22
Queer	3	6	0	0	0	9
Patriarchy	2	0	0	0	0	2
Total	622	214	119	99	17	1071

Table V. Code frequency in SS

Code	Frequency	Percentage
Equality	355	57 %
Gender	156	25.1%
Women	71	11.4%
Feminism	18	2.9%

Feminine	14	2.3%
Queer	3	0.05%
Patriarchy	2	0.3%
Total:	622	100%

Table VI. Percentage of each code in the sections of a teaching project in SS

Sections	Percentage
Objectives and skills	65.6%
Contents	26.3%
Bibliography	8.1%

Table VII. Frequency of codes in AH

Code	Frequency	Percentage
Equality	93	44.7%
Women	46	22.1%
Gender	35	16.8%
Feminism	27	13.0%
Feminine	7	3.4%
Total:	208	100%

Table VIII. Percentage of each code in the sections of a teaching project in AH

Sections	Equality	Gender	Women	Feminism	Feminine
Objectives and skills	83.33%	35.71%	0.00%	0%	0%
Contents	12.50%	39.29%	24.39%	18%	50 %
Bibliography	4.17%	25.00%	75.61%	82%	50%

Table IX. Frequency of codes in EA

Code	Frequency	Percentage
Equality	104	92.04%
Women	3	2.65%
Gender	5	4.42%
Feminine	1	0.88%
Totals:	112	100.00%

Table X. Percentage of each code in the sections of a teaching project at EA

SECTIONS	Equality	Gender	Women	Feminism
Objectives and skills	97.85%	50.00%	0.00%	0%
Contents	1.08%	40.00%	33.33%	100 %
Bibliography	1.08%	10.00%	66.66%	0%

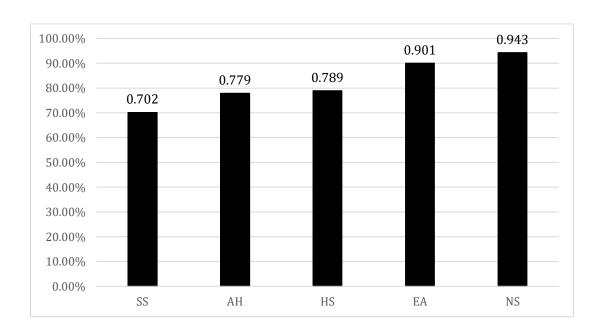
Table XI. Frequency of codes in HS

Code	Frequency	Percentage
Equality	64	65.31%
Gender	34	34.69%
Total:	98	1

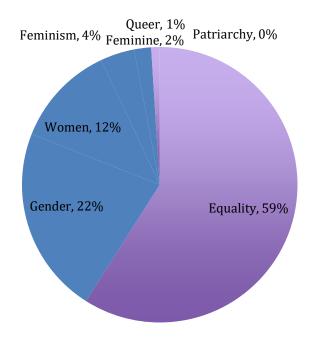
Table XII. Percentage of each code in the sections of a teaching project in HS

SECTIONS	Equality	Gender
Objectives and skills	77.4%	16.1%
Contents	55.5%	44.5%
Bibliography	40.1%	59.9%

Graph 1. Percentage of projects without gender references by fields of knowledge



Graph 2. Percentage of each code on the total by field of knowledge



Graph 3. Percentage of appearance of the codes in the different sections of the teaching project

