Communication Papers

Media Literacy & Gender Studies

Overview of Spanish Universities' Sustainability and Sustainability Communication Performance

Author
Esra Bayhantopçu
Asst. Prof., Faculty of Communication, Istinye University, Istanbul, 34396, Turkey, esra. bayhantopcu@istinye.edu.tr, and
Postdoctoral Researcher, Universitat Jaume I, Spain, bayhanto@uji.es
ORCID ID: 0000-0001-6680-8414

Abstract
Sustainability is not only essential for protecting the environment; it is also important for equality, human rights, the fight against hunger, education, health services and social development. Sustainability communication is just as important as these efforts. Through communication, it is possible to make these efforts known and raise awareness on the subject. Universities, which have the greatest role in the development of society, are responsible for raising informed and aware future generations and leading other institutions. This research aims to holistically assess current sustainability and related communication practices, particularly in terms of gender/equality, to reveal the general framework of sustainability structures in universities and to examine communication practices surrounding sustainability in Spanish universities, which perform well in this regard. A survey was conducted with 12 Spanish universities which are scored in THE and QS World University Rankings according to their Sustainable Development Goals (SDG) performances. According to the findings; in terms of gender equality and equity practices, Spanish universities perform well. However, it was revealed that communication efforts need to be improved. It can be argued that this inadequacy inhibits awareness on equality issues and sustainable development.

Keywords: Sustainability, equality, gender equality, sustainability communication, sustainability in Spanish universities

1. Introduction

While higher education was primarily a component of nation building in the past, higher education institutions today play an international role. Through their research and education activities, they ensure the realization of SDGs, innovation and development, and the training of professionals and citizens with skills and sensitivities suited to the globalizing age (Wit, Rumbley and Ramírez, 2017: 64). Universities play a crucial role in the achievement of sustainable development and today many throughout the world are trying to become sustainable entities.

Ferrer-Balas et all. (2008) have proposed five important critical characteristics that determine a sustainable university: offering transformative education, conducting interdisciplinary and trans-disciplinary research, solving social problems, building networks, and providing leadership and vision to foster proactive responses to societal change. Because education can effect change in people's daily living behaviors, teaching is vital to meeting sustainability goals. Therefore, universities function not only to produce and transfer relevant knowledge, but also to educate and train leaders who can contribute to a sustainable future (Solís-Espallargas et al., 2019: 1).

HOCHN conducted interviews with eleven HOCHN partner universities about measures to shape the sustainability process at universities. The result was a map of measures to shape the sustainability process at universities which also offers an overview for communication activities within the universities (HOCHN, 2019: 30, 33). According to the map; management (area specific and sustainability management), observation and analysis (sustainability reporting, evaluation, audits), orientation (mission statements, guidelines, action plans), creating awareness (public relations, university days, sustainability reports), and transfer (transfer office, interchange between university presidents) should be integrated to 'coordination' activities (coordination offices, environmental/sustainability coordinators, student-run green offices), 'networking' and 'operational measures'. Under 'networking', 'general consultation' includes commissions, committees, advisory councils, working groups, and student initiatives, and 'theme-based consultation' includes thematic working groups or study groups, research centers of platforms, student networks and congresses. 'Operational measures' includes open house events, university research with business partners, sustainable procurements, project days, seminars, workshops, etc. On the map, it is stated that all these issues are interconnected with external stakeholders, teaching, research, campus management and students (HOCHN, 2019: 33).

Based on this map, it can be claimed that the first step for successful sustainability management is developing a strategic approach. Once sustainability is incorporated into the internal strategic management components, the corporation's sustainability agenda can then be clearly communicated to various stakeholders (Galpin and Hebard 2018: 17). At this point, it is important to spread these practices among the other universities. Sustainability communication can be defined as a term for communication approaches explicitly designed to facilitate sustainable development. It can be defined as many-to-many communication mode with non-hierarchical, horizontal structures. Its purpose is sharing concepts or frameworks related to sustainability (Fischer, et all, 2016: 2). Communication creates awareness of this subject and makes these applications known throughout the university as well as developing the system.

To provide education for sustainable development (ESD) implementations, open communication and feedback between all stakeholders should be facilitated and encouraged. Active participation of all stakeholders ensures ownership and longevity of ESD practices. Strong collaborations and communication and official leadership support of top management increase the effectiveness of these studies (Weiss, Barth and Wehrden, 2021). Therefore, apart from implementing sustainability practices within the university, communicating it is of importance.

This research aims to holistically assess current sustainability and related communication practices in Spanish universities, particularly in terms of gender / equality, to reveal the general framework of sustainability structures in universities and to examine communication practices surrounding sustainability. Although there are many studies on sustainable universities in the literature, there is no research that presents a general portrait of universities' sustainability and sustainability communication efforts. This study aims to provide a general idea in this context.

2. Development of Sustainability at Higher Education Institutions

The history of sustainability in higher education dates to the 90s. In 1990 in Talloires, France, the first official statement, named as The Talloires Declaration (TD), was made by the presidents, rectors, and vice chancellors of universities from all regions of the world for environmental sustainability in higher education (The Talloires Declaration, 1990). In 1992, the United Nations (UN) Conference on Environment and Development held in Rio de Janeiro, provided a framework for action in Agenda 21 and declared that education, training and public awareness are critical tools for the transition to sustainable development (UN, 1992: Paragraph 36). In 2002, the UN General Assembly declared the decade 2005-2014 as the 'Decade of Education for Sustainable Development' (DESD) and called on governments to integrate sustainability principles into their education strategies and action plans. At the 37th session of the General Conference on ESD in 2014, UNESCO was selected as the lead agency for the implementation of Chapter 36th on education of Agenda 21. UNESCO first launched the Education Global Action Program (GAP) for 2015-2019 on Education for Sustainable Development in 2013 at the UNESCO World Conference held in Aichi-Nagoya, Japan. Five Priority Action Areas were identified: advancing policy, transforming learning and training environments, building capacities of educators and trainers, mobilizing youth, and accelerating sustainable solutions at the local level. Another plan focused on strengthening the ESD contribution for 2020-2030, with the goal of achieving all 17 SDGs (ESD for 2030) (UNESCO, 2014: 9). The overall aim of DESD is to integrate the principles, values and practices of sustainable development into all aspects of education and learning and the effort has fostered behavioral changes that create a more sustainable future in terms of environmental integrity, economic viability, and social improvements for present and future generations (UNESCO, 2021). Integrated issues include climate change, disaster risk reduction, sustainable livelihoods, sustainable consumption and production, biodiversity and poverty reduction. In ESD participatory teaching and learning methods, such as enabling students to think critically and make decisions in cooperation, are important (UNESCO, 2011: 8).

The Copernicus Alliance is an initiative originating in 1993 which aims to promote sustainable development in European Higher Education. A Copernicus Charter (University Charter

for Sustainable Development) 2.0 was released in 2011. To date, more than 320 higher education institutions from 38 countries in Europe have signed the Charter, declaring that they will give an important place to sustainable development in their activities. Copernicus-Campus, a network of European universities for sustainable development, was established to mobilize universities and academia for sustainability and to support them in the Bologna Process; it has developed strategic guidelines for the incorporation of sustainable development into the European Higher Education Area in 2007 to provide strategic assistance on how to integrate sustainable development into degree structures, learning outcomes, quality systems and social dimension (COPERNUS-CAMPUS, 2010).

The Higher Education Sustainability Initiative (HESI), an open partnership between the UN Department of Economic and Social Affairs, UNESCO, UN Environment, UN Global Compact's Principles for Responsible Management Education (PRME) Initiative, UN University (UNU), UN-HABITAT and UNCTAD, was created in 2012 and launched in Rio+20. This platform expects university leaders to implement sustainability plans, embed sustainability in the curriculum, and report progress to achieve transparency. Over 270 universities from 50 countries have participated in HESI to support sustainable development, promote sharing among stakeholders, trade best practices related to sustainability, assist in science and policy making, and raise the profile of higher education (UN, 2022). The International Sustainable Campus Network (ISCN), established in 2007, integrates sustainability into campus operations, research and teaching. It consists of over 95 world-leading colleges and universities representing more than 30 countries (ISCN, 2022).

Apart from these worldwide guidelines and initiatives, countries also develop their own networks. AASHE (The Association for the Advancement of Sustainability in Higher Education), founded in 2005, includes over 900 members across US and Canada (AASHE, 2022) working to advance sustainability in higher education. HOCH-N, the project Sustainability at Higher Education Institutions: develop – network – report (HOCH-N) is a joint project funded by the BMBF (Federal Ministry of Education and Research) promoting sustainable development in teaching, research, operations and the cross-sectional areas of governance, sustainability reporting and transfer at German institutions of higher education (HOCH-N, 2022). Likewise, The Australian Sustainable Schools Initiative (AuSSI) provides a framework for Education for Sustainability activities in universities and other schools (DEWHA, 2009).

Apart from these initiatives, rankings have been developed to evaluate the performances of the universities not only in terms of their academic success but also in terms of their environmental and social impacts. These include the QS World University Rankings, Times Higher Education World University Rankings (THE), the Academic Ranking of World Universities (ARWU), and Sustainability Tracking, Assessment & Rating System (STARS) which was developed by AASHE.

Laws and regulations are also contributing to this process. Spain is one of the countries that performs well in this area. In 1983, the University Reform Law stipulated Spanish universities can establish their own criteria to select researchers, organize, and structure their departments and research groups (OECD, 2021: 9). In Spain, there are also laws to help integrate sustainability practices into institutional systems. The Organic Law 6/2001, of 21 December, on universities (Gobierno de Espana, 2001) and the Organic Law 3/2007 of 22

March ensure Effective Equality of Women and Men. These laws define rules regarding gender equality, violence against women related to gender, and sexual harassment in the workplace (Gobierno de Espana, 2007). According to these laws universities must have equality units in their organizational structures and they should publish equality plans.

According to some sources Spanish higher education institutions have made significant progress in this regard in recent decades, enabling the country to improve its performance in research and higher education. The country's active participation and links to the European Higher Education and Research Areas are evidence of this progress (Wit, Rumbley and Ramírez, 2017: 68). According to De Filippo, et. all's research on sustainability in Spanish universities, Spain shows significant developments in the field of sustainability in scientific publications, European projects, education and training studies (De Filippo, et. all, 2019).

The Conference of Rectors of Spanish Universities (Conferencia de Rectores de las Universidades Españolas) (CRUE), an organization of 76 universities in Spain established in 1994, created a Working Group for Environmental Quality and Sustainable Development in 2002. Its purpose is to promote risk prevention and environmental management initiatives and participation and awareness in universities and inter-university cooperation in relation to these. In 2005 CRUE published a document, updated in 2011, entitled 'Guidelines for the Inclusion of Sustainability in the Curriculum'. The guidelines recommend that curricula be comprehensively reviewed from a sustainable human development perspective for the integration of sustainability into all courses; that sustainability criteria be added to educator assessments to ensure that teaching and research activities are in line with sustainability principles; and that university quality assessment systems include sustainability criteria (CRUE, 2005). Ministry legislation also states that education in any professional activity should contribute to the awareness and development of human rights, democratic principles, principles of equality between women and men, solidarity, environmental protection, and the promotion of a culture of peace (CRUE, 2005). The CYD Foundation (Foundation for Knowledge and Development) is another initiative which supports Spanish universities in contributing to the economic and social development of the country. It was established in 2002 in Spain to support Spanish universities in developing research activities and the transfer of knowledge, education for students, and open, flexible systems (Fundación CYD, 2022).

3. Methodology

COPERNICUS has identified sustainability headlines in universities as follows: Policy, planning and administration; Research; Curriculum/teaching; Service to society; Human resources and staff development; Physical operations/infrastructure; Networking and partnerships; Assessment and reporting (COPERNICUS Campus, 2010). In this study, the questionnaire form was designed with reference to these headings. However, since the scope of these headings is broad and it is not possible to design a separate questionnaire for each of them, only questions to obtain general information about the relevant areas were asked. The survey prioritized questions covering gender equality and equality classified under social sustainability performance and included sustainability communication questions.

29 Spanish universities ranked in QS World University Ranking 2022 - SDG Ratings (QS World University Ranking, 2022). 41 Spanish universities ranked in THE - Times Higher

Education impact ranking in 2022[1] (THE, 2023). The universities in the first 29 of the two indexes were included in the sample. Some universities in the second list were not in the first list, and vice versa; ultimately the sample comprised a total of 42 universities. E-mails were sent to the sustainability departments or possible related units of all these universities. The survey remained open on Google forms for 5 months between July and November 2022 and reminder mails were sent to many universities. At the end of the period, a total of 12 universities[2] completed the questionnaire.

The questionnaire consists of 37 questions. While the last 3 questions are open-ended questions, all of the other questions are designed as multiple-choice questions or Likert type scale questions. In order to gain knowledge about the sustainability and sustainability communication structures of universities, questionnaire is divided into 3 parts. The first part looks into the sustainability management structure of universities. The second part asks about teaching, research, community development practices of universities. The third part focuses on sustainability communication performance. The survey was designed and administered online using Google Forms as the data collection tool. Excel, and Word files were used for results analysis. In addition to the survey method, content analysis was used for this research. The sustainability websites of the universities participating in the survey were examined by using content analysis method. By this way, it was attempted to reach other information complementary to the data obtained from the survey.

4. Results

The data obtained from the survey are presented under three main headings: Sustainability Management and Reporting (1), Teaching, Research and Community Development Projects (2), Sustainability Communication (3).

4.1. Sustainability Management and Reporting

First, the sustainability management structure of universities is analyzed. Strategies, policies, planning, management; assessment and reporting; networking and partnerships are the topics covered in this section. This section also examines the management of equality/gender equality practices within the universities.

According to the data, 10 out of 12 universities have a sustainability office, while one does not. One of these universities determined that they have staff responsible for sustainability issues but no official office. While 8 universities have a sustainability committee, a formal committee reporting to senior management, one does not. 3 of them have a team but no official committee. Between 6-30 people work on these committees. One university determined that, apart from an official committee, they also have a sustainability student committee engaged in student clubs.

According to the collected data, 75% of the sample (9 out of 12) have established a sustainability strategy, 2 have no established strategy but have established a strategic plan, and 1 has no established strategy yet. Analysis of university web site sustainability pages shows the strategies of 7 of universities are stated on their web sites or in sustainability reports. The

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1   The 2022 lists were included in the research since the 2023 results were not announced in time to coincide with the project.

2   The name of the universities is not disclosed.

strategies and policies of 2 universities could not be found. The sustainability web sites of 6 universities offered specific details of their sustainability strategies and SDG contributions. Their work is organized within the framework of a long-term plan.

The existence of environmental, equality and human rights policies was examined within the scope of the sustainability policy. While 75% of the universities in the sample have an environmental policy, 17% have no official policy, but they do have targets regarding environmental issues. 8% have no policy or targets regarding environmental issues. 64% have a human rights policy, while 27% have no official policy but have targets about human rights issues. 9% have neither a policy nor a target on human rights issues. 100% of the universities in the sample have a gender equality policy. 10 out of 12 universities have membership in equality-related networks; 1 does not; and 1 university ticked 'other' option.

While 8 universities publish sustainability reports, 4 do not. When examined by university web site, some of the reports are seen to refer specifically to the university's SDG contribution in detail, while others only state general information. While some reports are published as sustainability reports, others are incorporated into annual reports. The first university to publish a sustainability report did so in 2008 and has published 12 reports to date. While some of the university's reports are available in both English and Spanish on the university's website, many of them are available only in Spanish.

10 out of 12 universities have equality units. One of them is developing and plans to open such a unit. 1 possesses no such unit. All the universities in the sample have an equality plan. Table 1 shows the number of equality plan the universities have published up to today. Basic information on ethical issues within the scope of equality unit practices was also obtained. According to the data 9 universities have an ethical code and ethical line, 2 are working on it, and 1 of them has none.

Table 1. Equality Plans in Number

4.2. Teaching, Research and Community Development Projects

The second section of the questionnaire addresses teaching, research and community development practices of universities. Curriculum/teaching, research, general sustainability operations, service/sustainability projects, human resources and staff development are the topics identified and examined in this section.

According to responses to the questionnaire, 2 out of 12 universities include sustainability in their curricula. 7 include sustainability topics in some but not all of their curricula. 2 aim to incorporate sustainability into all curricula. All universities conduct master's programs on sustainability. The questionnaire asked whether there were sustainability trainings not only for students but also for academic and administrative staff. The frequency of trainings for each group was assessed using a Likert type scale. 75% of the universities stated that they sometimes provide sustainability training to their academic staff, while 25% stated they provide sustainability training often. 58% stated that they sometimes provide sustainability training to their administrative staff, 25% stated they provide it often and 17% stated they provide it frequently. 42% stated they provide students sustainability training sometimes, 41% frequently and 17% often.

Table 2. Sustainability Trainings

Because of the scope of this research, it was not possible obtain specific details or numbers on the research on sustainability; and thus only allocation of funds for sustainability research was investigated. 5 universities have a research fund to support sustainability researches, 4 of them support sustainability projects from the general research budget but have no official budget. One university has no sustainability research budget. 2 universities have no idea about this allocation. 75% of the universities have a sustainability budget, 8% have no official budget but do allocate a budget for sustainability issues. 17% have no budget for sustainability issues.

The questionnaire asked about projects carried out by the university for social development, particularly in the area of equality. 100% of the universities conduct sustainability projects; 58% determine they do so often, 34% determine they do so always and 8% determine they do so sometimes. 11 have projects surrounding regional development, and 1 marked 'other' option. 10 out of 12 universities conduct ongoing projects to fight violence, 1 of them has no such project and 1 marked the 'other' option. 9 (75%) have ongoing projects for equal rights; 2 determined that they sometimes have related projects but at the time of the survey there was none; 1 marked the 'other' option. 58% of the universities measure all environmental consumption, while 42% measure only some. There is no university that does not measure its environmental consumption, and according to web site data most conduct environmental projects.

The questionnaire also asked the areas in which the universities are currently carrying out sustainability projects. Table 3 presents the results: 24% of the projects address the environment; 21% address equality/gender equality; 17% address innovation; 15% address community development; 11% address disadvantaged people; 6% address human rights; 4% address youth policies; 2% address children.
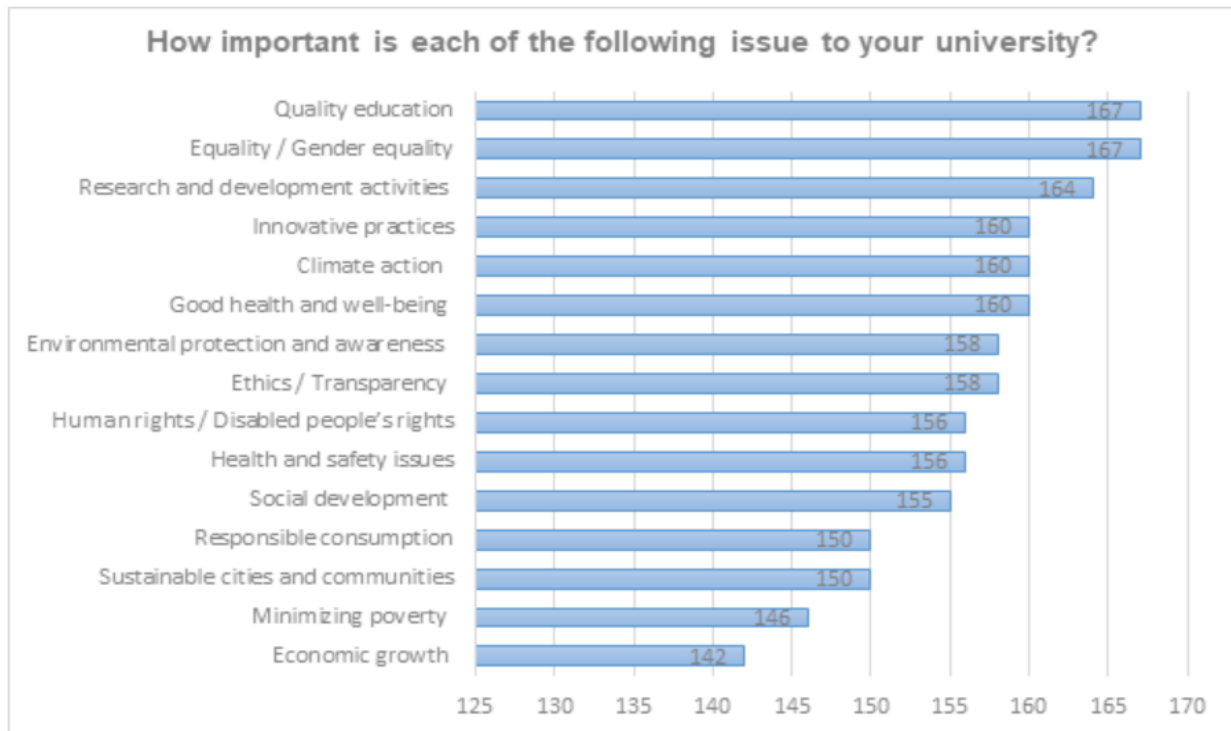
Table 3. Sustainability Projects' Topics
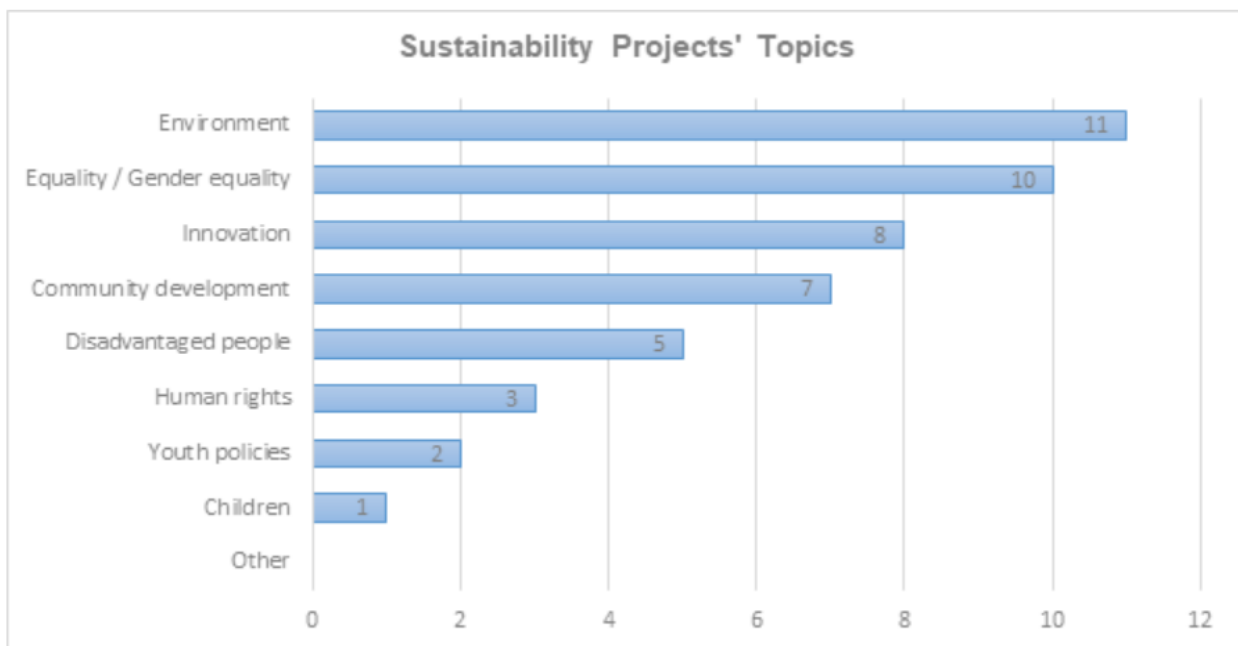
Universities were also asked to prioritize the main issues related to sustainability for themselves, scoring each subject between 1 (not important at all) and 10 (very important). Table 4 presents the data. 'Quality education' and 'Equality' as well as 'Gender equality' are the highest priority issues for the universities, followed by 'Research and development' activities. 'Innovative practices', 'Climate action', 'Good health and well-being' were rated third in importance, followed by 'Environmental protection and awareness', 'Ethics/Transparency', 'Human rights/Disabled people's rights', 'Health and safety issues', 'Social development',

'Responsible consumption', 'Sustainable cities'. As shown in Table 4, there is no significant difference between the importance levels of these issues. 'Minimizing poverty' and 'Economic growth' were ranked lowest in importance.

Table 4. Importance of the Sustainability Issues by Topic

How important is each of the following issue to your university?

Issue	Value
Quality education	167
Equality / Gender equality	167
Research and development activities	164
Innovative practices	160
Climate action	160
Good health and well-being	160
Environmental protection and awareness	158
Ethics / Transparency	158
Human rights / Disabled people's rights	156
Health and safety issues	156
Social development	155
Responsible consumption	150
Sustainable cities and communities	150
Minimizing poverty	146
Economic growth	142

In an open-ended question, universities were asked to describe their strengths in terms of sustainability. One stated that its sustainability practices have been going on for 25 years, and that its sustainability plans and practices demonstrate longevity. The most significant strength identified by the universities is the integration of sustainability into institutional strategies and business units. One of the universities stated it is leading a real cultural change, working to ensure that the university adopts a comprehensive sustainability mindset and creating long-term value. Another strength cited is sustainability practices support by the rector and senior management. One university stated that most researchers carry out sustainability projects and research transfer takes place, producing alliances with other institutions and companies. This university notes that establishing networks and disseminating research results offers a significant advantage. Innovative practices, research and action plans are other key strengths identified by most universities. Increasing environmental awareness and management; implementing a strategic environmental plan; establishing a sustainability budget; engaging in partnerships and joining related networks are other strengths mentioned.

Another open-ended question aimed to identify the difficulties universities experience in sustainability management. All universities answered that tight budget and lack of funds or lack of resources is the main difficulty area. Lack of social awareness among students, dif-

ficulties involving students in projects and lack of employee motivation were other problems identified, as well as lack of a formal sustainability plan, absence of an environmental office, slow development of curriculum and disruptions in interdisciplinary projects.

4.3. Sustainability Communication

The last part of the survey examines sustainability communication processes of the universities. While 75% of universities always do sustainability communication, 17% do it frequently and 8% only sometimes. These statements do not clearly show how often the communication takes place but do provide a general idea of whether communication studies have been carried out at all on the subject.

All universities use social media for sustainability communication and use it most often of all communication tools. In addition, all universities but one frequently use their websites, e-mail notifications, conferences and panels for communication purposes. YouTube videos, courses, meetings and posters are also used for to disseminate information about sustainability activities.

Table 5. Sustainability Communication Tools
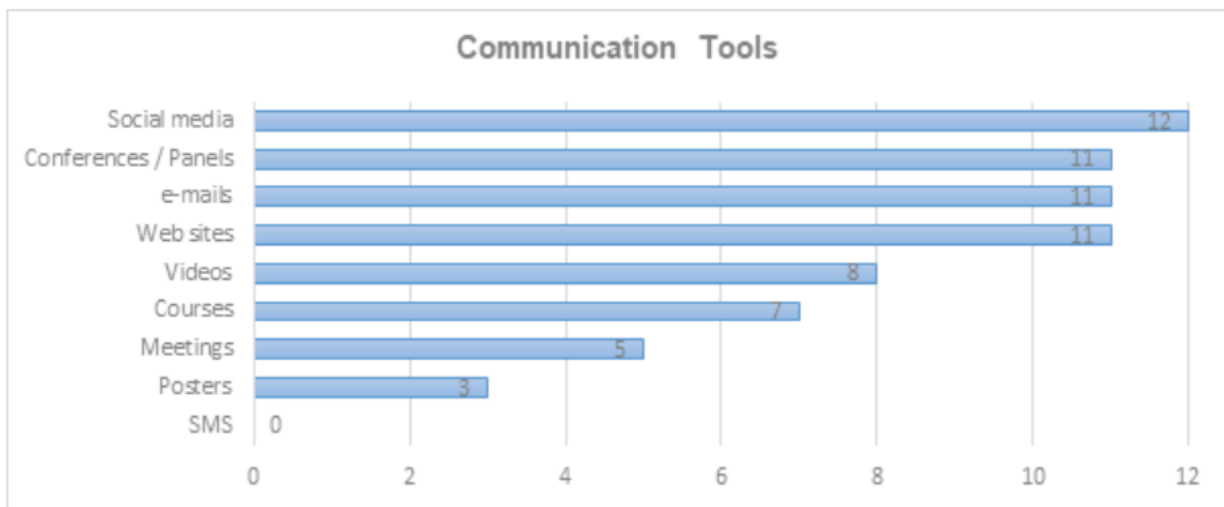
Sustainability awareness surveys measure the effectiveness of studies and help plan for development. 75% of universities (9 out of 12) have implemented a sustainability awareness survey; 25% (3) have not but aim to do so.

5. Conclusion

In this study, an online survey was conducted with 12 Spanish universities ranked according to their SDG performance in both the QS World University Rankings and THE Impact Rankings.

The first section of the survey examines sustainability management structure, strategies,

ESTILIIt is important that universities make considerable efforts to improve their own "sustainability profile," committing to an ongoing process of informing, educating and mobilizing society regarding the consequences of ecological degradation, its impact on global development and the conditions necessary for a sustainable and just world (COPERNICUS Campus, 2010: 23). All universities in the sample have high SDG performance and are engaged in significant sustainability efforts. Managing sustainability effectively, carrying out activities in training and research, and organizing long-term social responsibility projects are essential for social development. The universities in the sample show high performance in this regard.

Along with strategic sustainability management, regular communication with all stakeholders is essential. Incorporating sustainability into corporate culture, identifying the materiality topics and making them known to everyone is only possible with effective communication. Thus, conducting sustainability communication managed from one center according to a sound strategy is important. Every sustainability initiative in the field of education and research is a communication activity and should be widely disseminated. In addition, both equality and sustainability reports, as well as awareness surveys, are the best tools for sustainability communication. It is important to communicate such reports and each strategy implemented on the subject, and to inform academic and administrative staff on the subject. Likewise, community engagement or social responsibility projects both enable development and raise awareness to ensure widespread adoption of such projects. Communicating these projects both within the university and in the area where the university is located will increase awareness of the issue.

Suggested communication activities to raise awareness on sustainability issues are as follows: seminars, panels, lectures, posters and videos, and regular sustainability-related newsletters. In addition, awareness surveys can be conducted with students and staff and the results can be shared with students, academic and administrative staff through meetings, e-mails and other related channels. The importance of the topic can be emphasized in courses. For this purpose, regular seminars for academic staff can be organized. E-learning videos can be prepared and all relevant stakeholders can be trained. New methods can be developed to motivate students to participate in voluntary activities so that they can participate more actively in social responsibility projects. Creating interdisciplinary projects on sustainability, sharing relevant research results with external stakeholders, and reporting goals and results are also of importance. Adding relevant topics to orientation programs, using social media effectively are other recommended activities within the scope of sustainability communication.

Continuous and widespread sustainability communication is important in terms of raising awareness in the society in a short time. Through sustainability communication, it is also possible to disseminate best practices on gender equality and equality and positively change behaviors in this regard.

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Biographie

Esra Bayhantopçu graduated from the joint international PhD program of Paris 1 Panthéon Sorbonne University (Political Science Department) and Galatasaray University (Media and Communication Studies Department) in 2017. She completed her master's degree in Marketing Communication at Galatasaray University (2010) and her bachelor's degree in Business Administration Department at Dokuz Eylül University (2004). During her academic studies, she has also been working as a consultant since 2010, providing consultancy to national and international companies in the field of Sustainability. Her academic expertise is in

the fields of sustainability, media and communication and gender. Since 2018, she has been working as Asst. Prof. at Istinye University, Faculty of Communication. Between 2020-2022, she served as a Strategic Process Management Advisor in the Rector Advisory Board and as the vice director of the Sustainability Center. She has been working as a postdoctoral researcher at Jaume I University, Spain (2022-2023), with the support of TÜBİTAK Fellowship.

Conflicts of Interest: The author declare no conflict of interest.