Sustainability training at Spanish public faculties of education: a virtual ethnography

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Formação em sustentabilidade em faculdades de educação públicas espanholas: uma etnografia virtual

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Abstract: Various institutional statements and official documents refer to the Sustainable Development Goals and sustainability training. This should imply a university education in these values, considering that those who are going to train the new generations, in the Spanish State, must pass through the faculties of education. Through an investigation developed thanks to the methodology and design of virtual ethnography, the web pages of all the Spanish public faculties of education were analyzed, managing to find few training options during the initial period of the 2020/2021 academic year, specifically during the months of September and October, in a reality that reflects deficiencies that should be corrected immediately. Education for sustainability cannot be a priority in the 2030 Agenda and yet, in future education professionals, remain in a declaration of intentions, or something that implies little more than some isolated training course, and the results of the research show that the object of study barely manages to be found in the training offered. In the same way, being able to find training for education in sustainability should not involve an arduous research within the official websites, since this would not reflect a priority approach on the part of the institutions.
Key words: higher education; sustainable development; training; universities; virtual etnography**.**

Resumo: Diversas declarações institucionais e documentos oficiais referem-se aos Objetivos de Desenvolvimento Sustentável e treinamento em sustentabilidade. Isso deve implicar uma formação universitária nesses valores, considerando que quem vai formar as novas gerações, no Estado espanhol, deve passar pelas faculdades de educação. Através de uma investigação desenvolvida graças à metodologia e design da etnografia virtual, foram analisadas as páginas *web* de todas as faculdades públicas espanholas de educação, conseguindo encontrar poucas opções de formação durante o período inicial do ano letivo 2020/2021, especificamente durante os meses de setembro e outubro, numa realidade que reflete deficiências que devem ser corrigidas imediatamente. A educação para a sustentabilidade não pode ser uma prioridade na Agenda 2030 e ainda assim, nos futuros profissionais da educação, ficar em uma declaração de intenções, ou algo que implique pouco mais que algum curso de formação isolado, e os resultados da pesquisa mostram que o objeto de estudo mal consegue ser encontrado na formação oferecida. Da mesma

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forma, poder encontrar formação para a educação em sustentabilidade não deve envolver uma pesquisa árdua dentro dos *sites* oficiais, pois isso não refletiria uma abordagem prioritária por parte das instituições.

Palavras-chave: ensino superior; desenvolvimento sustentável; formação; universidades; etnografia virtual.

1. Introduction

The United Nations Framework Convention on Climate Change, the Paris Agreement, the Sustainable Development Goals (SDGs), the Lima Ministerial Declaration on Education and Awareness-Raising, the Aichi-Nagoya Declaration on Education for Sustainable Development (EDS) (LEAL FILHO AND HEMSTOCK, 2019): declarations, agreements, purposes… undoubtedly, there are various institutional statements, but we have to understand how they are materialized in tangible realities, taking into account that barriers to innovation and sustainability in universities could be found (VEIGA *et al.*, 2019), therefore, we should go further than the merely theoretical, to the field.

We know that the multidimensional impact of the Covid-19 pandemic has led to isolation measures, such as the closure of public places and schools, and we can agree: disciplinary expertise is needed in various fields, such as climatology, geography, geology, geotechnics, hydraulic engineering, transport and mobility engineering, materials and architecture engineering, and urban planning (MORACI *et al.*, 2020). However, it is surprising that the basis of the whole system is ignored on a considerable number of occasions. They talk about science, politics, and public health (ROPER, 2020), and the responses of countries to the pandemic were disparate. Journals such as Science or The Lancet have something in common when reviewed on October 28, 2020: words such as education and training do not appear in the names of their articles (*SCIENCE*, 2020; *THE LANCET*, 2020). However, all of its authors, editors and publishers went to school and universities, and proper training could have taught us that this disease cannot be addressed only through individual responsibility (HORTON, 2020).

If we looked for all technical guidance on Covid-19 through the World Health Organization website, related to schools and institutions, we could just find ten documents; the oldest one, uploaded March 10, 2020, is a twelve pages writing, with two sentences about implement targeted health education, just saying: integrate disease prevention and control in daily activities and lessons. Ensure content is age-, gender-, ethnicity-, and disability-responsive and activities are built into existing subjects; when we check the age-specific health education section,

we will not be able to go further than upper secondary school (BENDER, 2020); on October 28, 2020, the newest document was uploaded September 14, 2020, and is ten pages long. We will not find in these last two writings neither words as universities or training nor sustainability (WORLD HEALTH ORGANIZATION, 2020).

The importance of education for sustainability is fundamental: every primary and secondary school teacher goes through the faculty of education sciences to obtain their respective degrees to teach in the Spanish state. We need to know what training for sustainability is actually taking place.

2. Methodology

There is an emerging range of methods that use the Internet to support the creation of primary research data, referred to as online methods, digital methods, and Internet-mediated research, for example (HEWSON, 2016). Although we can give validity to any nomenclature of related methodologies that are actually using the same study options, we would opt for one that we can almost consider classic, such as virtual ethnography (HINE, 2000; 2017). The development of this type of ethnography could be described as an exploratory process in which each new activity and each new form of data leads us to understand the implications of the ethnographic perspective in the context of study. At first, our plan for what data to look for involved moving from the general to the particular, but we didn't even know how that data would be configured along the way. At each stage of the investigation, we ask ourselves how to use enough ethnographic sensitivity to follow interesting leads. Qualitative methods sometimes are not the easiest ones, especially when you do not know what could you find, and there is no strict designed path, no matter how good your design of researching was, because we also believe that research should not be to obtain results that reflect a self-fulfilling prophecy.

We were aware that the proliferation of policymaking sites and activities around the world and the increasing mobility and flow of educational policies have significant implications for the way we conduct policy analysis work and educational policy research (BEACH *et al.*, 2018). Although the object of study, the Spanish educational science faculties, and the research focus, the sustainability training strategies, are specific, the qualitative data obtained would be large; although the study period was limited to the months of September and October 2020, basic months

in the configuration of the 2020/2021 academic year, there would be prior questions to be addressed, such as what access to training for sustainability we would find through the websites of each faculty.

Virtual ethnography seems to be an ideal method to understand not only the culture of sustainability, but if this one has reached our object of study. Organizations must develop a culture of sustainability to adapt to the new needs of society, in which socio-environmental threats are worrisome, knowledge is rapidly built and disseminated, as well as social and ecological risks; the emphasis on environmental strategy implies the adoption of measures capable of preventing or reducing the ecological damage caused by business activity (ALMEIDA & SORIANO-SIERRA, 2017) and sometimes perhaps the agreements between multinationals and universities may not go in this sense, prioritizing profit over sustainability (GALINDO, 2020). This idea seems fundamental to us to understand it as a methodological basis.

We had to know the specific number of universities, and more specifically, the specific number of faculties of education sciences, for which we approached the Ministry of Science, Innovation and Universities (MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES. GOBIERNO DE ESPAÑA, 2021), dealing with the section of University Statistical Requests. In this way, we were able to focus our study, finding out which and how many faculties of education sciences there are.

The question that determined the object of study was clear: What sustainability training strategies at Spanish public faculties of education had been taken, specifically, in the context of Covid-19, during the months of September and October 2020. Like other research within the field of study, which covered a similar period, they used digital media to reach and understand what was happening, the main objective of this research, and conducted a virtual, digital ethnography, to see how to learn through the information gathered thanks to the internet (DUQUE *et al.*, 2020), in particular, the main websites of the institutions studied.

Based on current research trends, the sample selection was performed having in mind the objective of the research study (PÉREZ-ESCODA *et al.*, 2020) so that not all faculties would be analysed, but only those of public ownership; different local idiosyncrasies could mean that there are all kinds of affiliated centres, de facto faculties, whose knowledge would escape us, so that we would not omit information with undoubtedly state-owned institutions.. The design also

considered an approach to a practically non-existent state of the art prior to our research, since we would talk about measures taken practically between the end of one academic year and another in Spain.

Given the high number of university institutions provided by University Statistical Requests, 143, we would select, as we said, those of public ownership and, based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA, 2021), and faculty by faculty, we would check what was done with respect to our object of study, recurring, if necessary, also at sub-sections of university websites, if any, those referring to sustainability, in case there were cross-cutting measures in the time period studied which could be used in the present research, provided that they could be accessed through the websites of the faculties of education sciences. The sustainability training strategies would be the main category of analysis, performing the relevant virtual ethnography on each website of each public faculty of educational sciences in Spain, in the selected space-time, focusing on the results with training content, if applicable.

3. Results and discussion

The Spanish Ministry of Universities published, in just over three pages, twelve recommendations to the university community to adjust the 2020-2021 university course to an adapted face-to-face course and measures for universities to act in the event of a suspected or positive case of Covid-19. Concerning training, it mentions training plans for teaching staff in online teaching, both in technical and methodological aspects. It is possible to read in this document eight measures related to information for the educational community and training in prevention measures, which occupy a page in length and based in recommendations. For students, self-care strategies are promoted. In the document, it is mentioned that the recommended measures require an effort of both reorganisation and investment, in order to be sustainable, and there are no training measures, nor anything related to sustainable development. The annex to the aforementioned includes just prevention and hygiene measures against Covid-19 for university centers for the 2020-2021 course (MINISTERIO DE UNIVERSIDADES. GOBIERNO DE ESPAÑA, 2020).

On 3 September 2020, the Spanish Minister of Universities, Manuel Castells, met with the Conference of Rectors of Spanish Universities (CRUE) to study the situation of the return to

university classrooms. This meeting did not result in any concrete measures or relevant developments to face the start of the academic year (VELASCO, 2020).

The CRUE website reported on the Supera Covid-19 Fund, launched by Banco Santander and the Spanish National Centre for Scientific Research, allocating 8.5 million euros to tackle the pandemic from the university. Analysing the terms and conditions of the Supera Covid-19 Fund, training only remains as a principle to be respected in a specific line, and only on digital competences, and sustainability is relegated to one of the many areas, within one of the three lines -the one with the least funding-, the previously mentioned social impact line, mentioning only the projects on studies and analysis of the situation from the perspective of the Sustainable Development Goals, impacts of the pandemic on the achievement of the 2030 Agenda, and comparative studies on health and the environment (CRUE, 2020). What could be called the official state of the art by the Spanish State lacked real measures of training in sustainability, and virtual ethnography could not find concrete actions in the period studied on any of the official government websites.

As far as the faculties of education sciences are concerned, from the 143 results obtained on the basis of the ministerial information provided by University Statistical Requests, we made the data screening to get closer to the question under study, respecting the considerations of the original source. We would eliminate the local subdivisions of the faculties of education of the National University of Distance Education, as well as the private universities, and we would keep the matrix, based on the first step of the PRISMA Flow Diagram (2021), that is, to identify the records by searching the database, in this case, provided by an official institution, which is the primary source.

Considering the practically total absence of data that included training for sustainability in the Spanish public faculties of educational sciences, our constructive results begin with the University of A Coruña, which in 2014 signed a collaboration agreement with the Foundation for Environmental Education for the implementation of ecological management procedures under the green flag Green-Campus. As far as the Faculty of Education Sciences is concerned, we find the loan programme to promote the use of bicycles as a sustainable mobility vehicle, resolved on September 2020, by which 70 bicycles were loaned, and the recognition of the most sustainable final degree projects in the Faculty of Education held in 2017, and the call for applications on 26

October 2020. There are various guides, campaigns, programmes, catalogues, news, photos... undated or prior to our date of study. Everything suggests that in this faculty there would be training for sustainability, but the fact that the last action plan collected is for the biennium 2017-2019, together with the totality of data from the previous analysis, makes it impossible for us to confirm it (FACULTAD DE CIENCIAS DE LA EDUCACIÓN. UNIVERSIDAD DE A CORUÑA, 2020).

Common to an estimable number of faculties is their alignment with the 17 SDGs, which were adopted by all member states of the United Nations (UN) in 2015. Protocols, contingency plans, and various issues related to Covid-19 are absolutely common on the websites of some faculties, but this does not imply concern with didactic training for sustainability. In the case of the Faculty of Education of San Vicente del Raspeig, Universidad de Alicante (2020), we only find, within its Action Protocol for the beginning of the university year 2020/21, that the Institute of Education Sciences and the Selection and Training Service would design and schedule, at the beginning of the academic year 2020-2021, training activities addressed to teaching and research staff (PDI), and administration and services staff (PAS), on the Covid-19 protocols at the Universidad de Alicante.

In the case of the Faculty of Education at the Universitat de Barcelona, we have to go to the link to the latter's environmental policies to find a new identification with the SDGs. Within the initiatives that would be carried out in relation to each goal, we have to click on each of the 17 SDGs -with few results- and in number 4, referring to quality education, we find that the Universitat de Barcelona, during the months of September and December, 2020, published on the advertising screens of the buildings animations showing various types of waste that usually appear in the university containers of the rest fraction, and indicated in which container they should be placed; also disseminated messages, using the accounts of the Environment Unit of the Office of Safety, Health and Environment on Twitter and Instagram (@mediambient_UB), or held a competition on waste prevention and improving selective collection (OFICINA DE SEGURETAT, SALUT I MEDI AMBIENT. UNIVERSITAT DE BARCELONA, 2020).

The Faculty of Education Sciences of the Universidad de Cordoba, for example, in its initial website, in its first widget on the right, has the option of visiting its common services and resources. Of the 34 options available, number 25, the environmental protection service, provides

different options, ranging from training and awareness-raising to consumption. Within the first of these, the one we would be most interested in here, there are up to 12 training actions aimed at any centre, department or service; two training actions aimed at departments and/or research groups with laboratories; and one training action aimed at subjects with laboratory practices. Something also worth highlighting is the so-called Sustainability Classroom, where even, in a non-academic way -as an appropriate educational value, from our point of view-, the aim is to spread principles of sustainability in the university community, defining in just three pages what curricular sustainability is, providing guidelines and orientations for the introduction of sustainability in the curriculum, and even including a teaching network for curricular sustainability. The Sustainability Classroom, coordinated by the Faculty of Education Sciences and the Environmental Protection Service, is a fundamental result that gives meaning to this research, a didactic contribution that is formative and transversal, permanent and coordinated (UNIVERSIDAD DE CORDOBA, 2020).

The Faculty of Education and Psychology of the Universitat de Girona, in the first place, from the second row of widgets on its homepage, in the upper left-hand side, includes the section *Get to know the UdG*. Here, we find, in the last place, the Social Commitment section, where, in addition to this unit, we find a section called *Sustainability*, within which a training section is included. In it, it is considered that the concept of education for sustainability implies a new way of thinking about the world, which integrates the ecological, social, and economic dimensions in a wide range of knowledge, wisdom, and skills, considering that the Universitat de Girona has assumed sustainability as one of the transversal competences that have been incorporated into all the degrees taught. This action would allow all students, regardless of the degree, to incorporate sustainability criteria in their future professional practice (ARBAT *et al.*, 2019). Specifically in our research focus, we found several courses with no specific start date, such as good environmental practices for sustainable management at the university, 10 hours for the PAS; introduction to the university for students, 25 hours, which includes training for sustainability and environmental management of university activity on campus; and finally, introduction to sustainability, a course that seems intended for the entire university community of 25 hours of theory plus 25 hours of practice in environmental organisations, within the framework of the courses of the volunteering programme of the Social Commitment Unit. This last course, which was guaranteed to be included in the period studied, offered the online introductory course to the Sustainable Development

Agenda, a course that could be divided into three blocks of 50 hours each; an online course, without a timetable, from 5th October to 1st November, to acquire skills to analyse the causes and consequences of the climate crisis from a perspective of sustainability and climate justice and, with the same characteristics, the course *What's happening in the world?*, one of whose four blocks was entitled as *towards a more sustainable and fairer world* (UNIVERSITAT DE GIRONA, 2020).

In the case of the Faculty of Education Sciences of Universidad de Malaga, the last icon that was literally at the end, on the right of its web page, without any description or image that would encourage us to think about it, gave access to Sustainability-Vice-rectorate of Smart-Campus, where the closest thing to our object of study, in the month of October 2020, was a day of beekeeping and urban gardens, and the projection of clay projectiles and seeds on a mountain in Malaga, all without any mention of our object of study or the faculty itself (SMART-CAMPUS. UNIVERSIDAD DE MALAGA, 2020).

The website of the Faculty of Education of Bilbao, Universidad del País Vasco, included in its last widget on the left-hand side the option to visit the Social Commitment and Innovation section, within which we found Teaching Innovation and Sustainable Development Goals. In the latter, we would include for our research the courses on ecological urban gardens in September 2020, as well as the project Children's and Youth Literature (CYL) and SDGs, aimed at familiarising students in the degrees of Early Childhood Education and Primary Education with the intersections of the SDGs and CYL, so that they learn to select works aligned with the SDGs for literary education and thus encourage their future students to develop the values associated with these goals (UNIVERSIDAD DEL PAÍS VASCO, 2020).

Likewise, in the Basque Country, we find the Faculty of Education, Philosophy and Anthropology of San Sebastian, through its website, in the thematic areas section, and fourth option, from the end, we find sustainability. In this area, we find two training actions in the month of September 2020: the conference entitled *The SDGs, their development and implementation, a great common goal* (administration-university-business), and the summer course *Agenda 2030 and the SDGs. Sustainable Development and Business. In Alliance*, with an academic validity of 20 hours (SUMMER COURSES. BIZKAIA ARETOA-UPV/EHU, 2020). Both activities, despite

being found on this website, were carried out in Bilbao, and therefore we add them, in accordance with this location, to Table 1, where we collect the most significant results of the research.

Table 1

The main information of the search in Spanish public faculties of education websites.

Faculties/universities	Sustainability training strategies	General description
University of Córdoba	17 training activities	12 training actions addressed to any centre, department or service; two training actions addressed to departments and/or research groups with laboratories; one training action addressed to subjects with laboratory practices.
University of Girona	5 training activities	One training action for Administration and services staff (PAS); one for students; three training actions for the whole academic community.
Faculty of Education (University of Bilbao)	4 training activities	Three actions for the entire academic community, one project for undergraduate students in Early Childhood Education and Primary Education.

Source: Own elaboration.

4. Conclusions

The results obtained do not show the diffusion of broad sustainability training strategies in Spanish educational science public faculties in the period studied, which, through an international tool, could be extrapolated to the universities that host them. We talk about the Ranking of the most sustainable universities in the world: The UI GreenMetric World University Ranking (2021), a production of Universitas Indonesia. The aim of this ranking, not far away from the methodology of this researching, is to provide the result of online survey regarding the current condition and policies related to Green Campus and Sustainability in the Universities all over the world.

The results of the aforementioned ranking reflect the presence of only 29 Spanish universities out of a total of 912 for the year 2020. The factors analysed and scored were: setting and infrastructure, energy and climate change, waste, water, transportation, and education and research. Among the top 100 Spanish public universities, only the Autonomous University of Barcelona (16th place), the University of Alcalá (24th place), the Complutense University of Madrid (58th place), the University of La Coruña (65th place), and the University of Girona (91st place) are in the top 100.

Any faculty could argue about the implementation of didactic training activities for sustainability before or after this research, and they would undoubtedly be right, but the choice of dates seemed to us to be decisive in shaping the 2020-2021 course. Several recent research studies consider that the implementation of sustainability involves concrete actions, one of the key ones being training (ADAMS *et al.*, 2018; DE HOOGE & VAN DAM, 2019). The suggestions implied by the results of the present research are in line with the existing literature that considers insisting on the widespread inclusion of sustainability as a quality criterion in the curricula required by university institutions, considering fundamental the implementation of academic policies, goals and objectives that define applicable strategies to prevent further deterioration of the environment, starting a social transformation through a sustainable, altruistic, and ecological behaviour (GARCÍA-GONZÁLEZ, 2017; MARTÍNEZ-VALDÉS, 2019; MURGA-MENOYO, 2017; MURILLO *et al.*, 2020).

This research shows the analysis of specific results in a particular space and time and, thanks to virtual ethnography, these results are absolutely verifiable and replicable, always providing all the information that constitutes a primary source of knowledge. Of course, specific case studies, or other virtual or field analyses, can confirm or contrast the account's exposition.

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It is not possible to find a large number of sustainability training strategies in the institutions studied. Real policies are necessary to make this happen, going beyond discourse, mentions of the SDGs, or simply links to them, or also short courses of a few hours. It is necessary to go further, towards a real culture of sustainability. The results of this case study, summarised in Table I, suggest that not enough is being done in Spanish public faculties of education sciences. It is a priority to give training in sustainability to those who are going to train the new generations, and all of them, prior to this role, study, in the Spanish State, in the faculties of educational sciences. If we are aware of the effects of economic globalization (LEAL FILHO, 2011), let's try to address the inclusion of sustainability training throughout the education system. It is not a choice, but an obligation.

5. REFERENCES

ADAMS, R., MARTIN, S. AND BOOM, K. (2018). University culture and sustainability: designing and implementing an enabling framework. *Journal of Cleaner Production, 171*, 434-445. Doi: 10.1016/j.jclepro.2017.10.032

ALMEIDA, G. & SORIANO-SIERRA, E. (2017). Etnografia como estratégia investigativa da cultura organizacional para a sustentabilidade. *Revista de Gestão Social e Ambiental*, *11*(1), 38-55. Doi: http://dx.doi.org/10.24857/rgsa.v11i1.1234

ARBAT, E., CALABUIG, T., CABRUJA, T., JUANDÓ, J., LUSSÀ, R., MEDIR, R.M., ROMERO, A. & VILA, J. (2010). *Guia per a l'Adaptació a l'Espai Europeu d'Educació Superior. 10. Competències transversals: SOSTENIBILITAT*. Programa de Suport a la Qualitat Docent. Retrieved from https://www.udg.edu/ca/portals/50/Sostenibilitat/Formaci%C3%B3/Guia10.pdf?ver=2020-02-27-104957-623
BEACH, D., BAGLEY, C. & MARQUES, S. (Eds.). (2018). *The Wiley Handbook of Ethnography of Education*. John Wiley & Sons, Incorporated.

BENDER, L. (2020). *Key Messages and Actions for COVID-19 Prevention and Control in Schools*.

UNICEF. Retrieved from https://www.who.int/docs/default-source/coronaviruse/key-messages-and-actions-for-covid-19-prevention-and-control-in-schools-march-2020.pdf?sfvrsn=baf81d52_4

CRUE. (2020). *Convocatoria CRUE-CSIC-Santander. Fondo Supera Covid-19*. Retrieved from https://www.crue.org/wp-content/uploads/2020/09/2020.04.21-Convocatoria-Fondo-SUPERA-COVID-19.pdf

DE HOOGE, I. E. & VAN DAM, Y. K. (2019) Reach out and touch: student training community projects for sustainability - a case study. *International Journal of Sustainability in Higher Education*, *20*(7), 1278-1289. Doi: 10.1108/IJSHE-11-2018-0222

DUQUE, I., ORTIZ, C., SAMPER, J. & MILLÁN, G. (2020) Mapping repertoires of collective action facing the COVID-19 pandemic in informal settlements in Latin American cities. *Environment & Urbanization*, *32*(2), 523-546. Doi: 0.1177/0956247820944823

FACULTADE DE CIENCIAS DA EDUCACIÓN. UNIVERSIDADE DA CORUÑA. (2020). *Green Campus na Facultade de Ciencias da Educación*. Retrieved from https://www.educacion.udc.es/index.php?pagina=green-campus#

GALINDO, P. (2020, December 7). Cátedras universitarias vendidas a sucios intereses empresariales: otra forma de greenwashing. *BlogSOStenible: Noticias medioambientales y datos… aportando soluciones*. Retrieved from https://blogsostenible.wordpress.com/2020/12/07/catedras-universitarias-vendidas-a-sucios-intereses-greenwashing/

GARCÍA-GONZALEZ, E. (2017). Análisis de la presencia de los principios de sostenibilidad en propuestas metodológicas universitárias: Estudio de propuestas concretas en la Universidad de Cádiz. Departamento de Didáctica. Universidad de Cádiz. Enero 2016 (Tesis doctoral dirigida por los Drs. Dña. Pilar Azcárate y D. Antonio Navarrete). *Teoría Educativa, 29*(1), 300-302. Retrieved from https://gredos.usal.es/jspui/bitstream/10366/133992/1/Analisis_de_la_presencia_de_los_principi.pdf

HEWSON, C. (2016). Ethics Issues in Digital Methods Research. In Snee, H., Hine, C., Morey, Y., Roberts, S. & Watson, H. (Eds.), *Digital Methods for Social Science. An Interdisciplinary Guide to Research Innovation* (206-221). Palgrave Macmillan. Doi: 10.1057/9781137453662

HINE, C. (2000). *Virtual Ethnography*. Sage Publications.

_____. (2017). Ethnography and the Internet: Taking Account of Emerging Technological Landscapes. *Fudan Journal Human Social Science*, *10*, 315-329. Doi: 10.1007/s40647-017-0178-7

HORTON, R. (2020). *Offline*: Science and politics in the era of COVID-19. *The Lancet*, *396*(10259), 1319. Doi: https://doi.org/10.1016/S0140-6736(20)32221-2

LEAL FILHO, W. (2011). *The Economic, Social and Political Elements of Climate Change*. Springer.

LEAL FILHO, W., & Hemstock, S. L. (2019). *Climate Change and the Role of Education*. Springer.

MARTÍNEZ-VALDÉS, M. G. (2019). Educar mediante la sostenibilidad: promotor del fortalecimiento universitario. *Revista DELOS Desarrollo Local Sostenible, 12*(35), 1-11. Retrieved from https://www.eumed.net/rev/delos/35/educacion-sostenibilidad.html

MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES. GOBIERNO DE ESPAÑA. (2021). *QEDU-Búsqueda de títulos.* Retrieved from https://www.educacion.gob.es/notasdecorte/busquedaSimple?codTipoEstudio=GRADO&textTitul a=&__multiselect_codigosUniversidades=&nomTipoAcceso=Universidad&tipoUniv=T&chkEspa na=C&codigosUniversidades=T&codImpIdiomaExtranjero=&codigosProv=00&method:busqueda Simple=Buscar&d-4809369-n=1&codigosAmbitos=109&codigosAmbitos=143&codigosAmbitos=144&codigosAmbitos=149 &codigosAmbitos=109&d-4809369-o=1&d-4809369-p=1&codPresencialidad=&__multiselect_codigosAut=&tipoAcceso=1&notaCorte=&__multiselec t_codigosProv=&d-4809369-s=nomUniv

MINISTERIO DE UNIVERSIDADES. GOBIERNO DE ESPAÑA. (2020). *Recomendaciones del ministerio de universidades a la comunidad universitaria para adaptar el curso universitario 2020-2021 a una presencialidad adaptada y medidas de actuación de las universidades ante un caso sospechoso o uno positivo de Covid-19.* Retrieved from https://www.universidades.gob.es/stfls/universidades/ministerio/ficheros/COVID/Recomendacion es_del_Ministerio_de_Universidades_para_adaptar_curso.pdf

MORACI, F., ERRIGO, M. F., FAZIA, C., CAMPISI, T., & CASTELLI, F. (2020). Cities under Pressure: Strategies and Tools to Face Climate Change and Pandemic. *Sustainability, 12*(7743), 1-31. Doi:10.3390/su12187743

MURILLO-VARGAS, G., GONZALEZ-CAMPO, C. & BRATH, D. (2021). Mapping the Integration of the Sustainable Development Goals in Universities: Is It a Field of Study? *Journal of Teacher Education for Sustainability, 22*(2), 7-25. https://doi.org/10.2478/jtes-2020-0013

MURGA-MENOYO, M. A. (2017). Universidades en transición. Hacia una transformación institucional orientada al logro de la sostenibilidad. *Revista Iberoamericana de Educación, 73*, 61-84. Retrieved from http://rieoei.org/rie73a03.pdf

OFICINA DE SEGURETAT, SALUT I MEDI AMBIENT. UNIVERSITAT DE BARCELONA. (2020). *KeFaXoKi_UB: campanya de sensibilització ambiental sobre residus.* Retrieved from https://www.ub.edu/ossma/actualitat-medi-ambient/campanya-kefaxokiub-20/

PÉREZ-ESCODA, A., JIMÉNEZ-NARROS, C., PERLADO-LAMO-DE-ESPINOSA, M. & PEDRERO-ESTEBAN, L. M. (2020). Social Networks' Engagement During the COVID-19 Pandemic in Spain: Health Media vs. Healthcare Professionals. *International Journal of Environmental Research and Public Health, 17*(5261), 1-17. Doi: doi:10.3390/ijerph17145261

PRISMA. (2021). *Trasnparent Reporting of Systematic Reviews and Meta-Analyses*. Retrieved from http://prisma-statement.org/

ROBERTS, S., SNEE, H., HINE, C., MOREY, Y., WATSON, H. (Eds.). (2016). *Digital Methods for Social Science. An Interdisciplinary Guide to Research Innovation*. Palgrave Macmillan.

ROPER, W. (2020) Science, politics, and public health. *Science*, *370*(6515), 385. Doi: 10.1126/science.abf2837

SCIENCE. (2020). Contents. *Science, 370*(6515), 1-478. Retrieved from https://science.sciencemag.org/content/370/6515

SMART-CAMPUS. UNIVERSIDAD DE MÁLAGA. (2020). *Programa de Actividades Ambientales. Curso 2020-2021*. Retrieved from https://www.uma.es/smart-campus/info/127367/programa-de-actividades-ambientales2021/

SUMMER COURSES. BIZKAIA ARETOA-UPV/EHU. (2020). *Agenda 2030 and the SDGs. Sustainable Development and Business. In Alliance*. Retrieved from https://www.uik.eus/en/agenda-2030-y-los-ods-desarrollo-sostenible-y-empresa-en-alianza

THE LANCET. (2020). Current Issue. *The Lancet, 396*(10259), 1307-1372. Retrieved from https://www.thelancet.com/journals/lancet/issue/vol396no10259/PIIS0140-6736(20)X0043-2

UI GREENMETRIC. (2021). *Overall Rankings 2020*. Retrieved from http://greenmetric.ui.ac.id/rankings/overall-rankings-2020

UNIVERSIDAD DE ALICANTE. (2020). *Protocolo de actuación para el comienzo del curso universitario 2020/21*. Retrieved from https://web.ua.es/es/vr-infraestructures/documentos/prevencion/protocolo-de-actuacion-para-el-comienzo-del-curso-universitario-2020-21.pdf

UNIVERSIDAD DE CÓRDOBA. (2020). *Aula de Sostenibilidad. Sostenibilización curricular*. Retrieved from https://www.uco.es/aulasostenibilidad/index.php/sostenibilizacion-curricular

UNIVERSITAT DE GIRONA. (2019). *Formació en Sostenibilitat. Compromís social*. Retrieved from https://www.udg.edu/es/compromis-social/arees/sostenibilitat/en-que-treballem/formacio/formacio-en-sostenibilitat

UNIVERSIDAD DEL PAÍS VASCO. (2020). *Innovación Docente y Objetivos de Desarrollo Sostenible (ODS)*. Retrieved from https://www.ehu.eus/es/web/bilboko-hezkuntza fakultatea/info_informazio_akademikoa/innovacion_docente_y_objetivos_de_desarrollo_sostenible/edikdit_taldeak/irakaskuntzaren-berrikuntza

VELASCO, S. (2020, October 11). La brecha digital y el miedo a la 'elitización' de la universidad por la covid acompaña a los estudiantes en la vuelta a clase. *Público*. Retrieved from https://www.publico.es/sociedad/universidades-clases-online-miedo-politicas-privatizadoras-elitizacion-universidad-acompana-estudiantes-vuelta-clase.html

VEIGA, L., BEURON, T. A., LONDERO, L., DAMKE, L. I., SOARES, R. & LUIZ, L. (2019). Barriers to innovation and sustainability in universities: an international comparison. *Innovation and sustainability*, *20*(5), 805-821. Doi: 10.1108/IJSHE-02-2019-0067

WORLD HEALTH ORGANIZATION. (2020). *Considerations for school-related public health measures in the context of COVID-19*. World Health Organization. Retrieved from https://www.who.int/publications/i/item/considerations-for-school-related-public-health-measures-in-the-context-of-covid-19

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