

Article



Ocean I3. Pedagogical Innovation for Sustainability

Itziar Rekalde-Rodríguez^{1,*}, Julieta Barrenechea² and Yannick Hernandez³

- Department of Didactics, School Organisation, University of the Basque Country, 20018 Donostia-San Sebastián, Spain
- ² Euskampus Foundation, 48940 Leioa, Spain; julieta.barrenechea@euskampus.eu
- ³ Physical and Sporting Activity Sciences, Techniques Faculty, University of Bordeaux, 33000 Bordeaux, France; yannick.hernandez@u-bordeaux.fr
- Correspondence: itziar.rekalde@ehu.eus

Abstract: Universities are undertaking transformation projects that align their work with the Sustainable Development Goals. This paper describes how Ocean I3, an educational innovation project that aims to reduce plastic in the sea, has made an impact on its community over its three editions (2018/19 to 2020/21). Methodologically, it has been approached by the people who make up the technical team and academic coordination as an exploratory study using discrete, non-reactive techniques, mainly from the public domain (websites, blogs, press releases, etc.), and instruments, such as field notes and work material to manage, organize, and train within the project. The analytical procedure has represented a dynamic and systematic process of categorisation. The results highlight the repercussion of the project in terms of capstone projects, master's thesis, coursework, etc., produced by the students involved; association with employability; collaborative work from the teaching teams; monitoring experience for research purposes, and social dissemination of the project. It concludes by suggesting lines for Ocean I3 to work on in the future to make its footprint sustainable in institutions over time.

Keywords: higher education; sustainability; pedagogy; innovation; transdisciplinarity

1. Introduction

There is nothing new in the combination of addressing and resolving environmental problems using active methodologies that imply and give university students responsibility for their learning and our common commitment to the planet [1]. The actual innovation lies in creating a scheme where, in addition to the aforementioned elements, the work is woven into a cross-border (international) context, freely using four languages (multilingual), where different institutional, academic, and sociocultural (intercultural) approaches exist side by side and where challenges beyond discipline-related, partial gazes are addressed using complicity to tie together various areas of knowledge and alliances among professionals and entities in the territory (transdisciplinary) [2–5]. This is the complex context in which the innovation project presented herein lies.

The challenge addressed the questions of how university academic institutions and actors of the Basque-Aquitaine territory can work together; how to address such diverse academic works in academic curricular structures that do not coincide; how to get teaching staff to accompany students in such a complex context; and how to make the project sustainable. These were some of the initial problems faced that steered this research.

Ocean I3 is an innovative project in so far as it gives students the chance to develop various outputs (voluntary work experience, i.e., internships; projects and coursework; final degree projects, i.e., capstone projects; and end-of-master's projects, i.e., master's thesis) focusing on a common mission: that of plastics polluting the oceans. It is tackled using the so-called Mission-Oriented Research and Innovation approach that claims to point research, innovation, and training towards global challenges to thereby transform them



Citation: Rekalde-Rodríguez, I.; Barrenechea, J.; Hernandez, Y. Ocean I3. Pedagogical Innovation for Sustainability. *Educ. Sci.* **2021**, *11*, 396. https://doi.org/10.3390/ educsci11080396

Academic Editor: Neil Gordon

Received: 30 May 2021 Accepted: 28 July 2021 Published: 2 August 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). into achievable, specific, and measurable territorial objectives [6,7]. The idea of integrating civil commitment in the heart of the University, as proposed in the Civic University, so that participating universities are competitive on a worldwide scale and committed at a local level [8] is key in Ocean I3. The Civic University frames the management and political commitment model that the university acquires, and the Mission-Oriented approach focuses and implements the pedagogical work.

The teachers and students at the University of the Basque Country (UPV/EHU) and University of Bordeaux (UB) are working within their own curriculum framework. Nevertheless, the actual individual and collective work is shared in the Ocean I3 learning scenario and is contrasted and enriched in an international, intercultural, multilingual, and transdisciplinary environment, working with social actors and real problems/challenges from the cross-border coastline. Students do not have such powerful environments throughout their university studies to develop the skills for sustainability that are set out in the syllabus for the degree and master's degree programmes of both universities. Ocean I3 is not an additional or complementary course to their qualifications but rather an option for both students and teachers to develop skills for sustainability in a living learning environment through their involvement (academic papers, voluntary internships, etc.).

The purpose of this article is to describe and introduce, in quantitative and qualitative terms, the repercussion of this educational innovation project for sustainable development at university from the 2018/19 academic year to 2020/21 for use as a springboard to reveal the remaining areas and lines of improvement to make Ocean I3 a real, significant learning environment for a wider community. Describing the work carried out in the Ocean I3 educational innovation environment entails, on the one hand, describing the achievements that are specified in section titled Purpose and Objectives (Section 4), and on the other hand, this account is also a reflective exercise in order to know which aspects need to be improved and which need our prompt attention.

2. Higher Education Institutions Addressing Education for Sustainable Development

When researching education for sustainability, it should be understood that the concept of sustainability goes beyond that of the environment, as it not only includes the search for environmental quality but also fairness and social justice. With this in mind, the university appears as a valuable catalyst for driving change towards sustainability, as its work focuses on training future professionals who make decisions that directly or indirectly influence their environment [9].

Universities play an important role in shaping the future of society all over the world in terms of sustainable development, as they generate new knowledge and help develop appropriate skills and raise awareness on sustainability [10]. Consequently, Education for Sustainable Development (ESD) at university is necessary to improve capability and individual commitment to building sustainable societies [11].

It has taken years of hard work from university leaders to reach this point. This path will be briefly described below, beginning with the Talloires Declaration (1990), in which a group of presidents, chancellors, and deans of universities met to encourage higher education institutions to lead the world in the development, creation, support, and maintenance of sustainability. In short, they debated the role of the university in the transition towards a more sustainable society [12]. The meeting drew to a close with an official 10-point declaration that defines the role of universities in education for sustainability. One year later, open debate was set up among Canadian universities as the result of the Halifax Declaration Action Plan (1991) that encouraged universities to rethink and rebuild their environmental policies and practices [13].

In 1992, the Rio Declaration on Environment and Development featured 27 principles seconded by higher education institutions, and in 1993, the Swansea Declaration and the Copernicus Charter were signed. These latter declarations were interesting because, for the first time, the spotlight switched from merely training students to also including teachers. The need to train teachers was recognised if universities require them to teach

about sustainability. Both declarations strengthen the universities' ethical and moral responsibility to make the world safer and more civilised from the environmental point of view [14].

Besides, the United Nations General Assembly declared 2005 to 2014 as the Decade of Education for Sustainable Development [15]. The main aim was to meet goals from previous declarations and from Chapter 36 of Agenda 21, which invites governments to design their own agendas to devise sustainable development actions for the 21st century [16].

In 2000, the World Association of Higher Education for Sustainability aimed to adopt all the previous declarations to rally the signatories to implement actions through the following: (a) approval and application of the Talloires, Kyoto, and Copernicus declarations; (b) devising a tool kit to move from commitment to action in teaching, research, and outreach; and (c) strengthening the development of excellence centres in both developed and developing countries and committing them to setting up collaboration networks [17]. The conference on Higher Education for Sustainability: Towards the World Summit on Sustainable Development was held in 2002, leading to a new ESD declaration from universities. Meanwhile, in 2005, in Spain, the document approved by the Executive Committee of the Environmental Quality and Sustainable Development Work Group for the Conference of Spanish University Deans included basic cross-discipline content on the training processes for all qualifications regarding the skills required for environmental and socially sustainable human development [18,19]. It was proposed that graduates should acquire basic skills to make decisions and perform professional actions from the perspective of sustainability [20]. This was similar to the process followed by The Conference of University Presidents (CPU) of France [21].

Following this quick recap, we are currently immersed in the new action implemented in 2015 with a 2030 deadline, known as the Sustainable Development Goals Agenda [22]. Compared to previous initiatives, it focuses on action and addresses goals from a quality perspective. It acknowledges that the greatest challenge in the world today is eliminating poverty, as this is a prerequisite for sustainable development [22]. This Agenda sets 17 goals known as the Sustainable Development Goals (SDG), referring to economic, social, and environmental development of the planet. Since its approval, universities have taken the 2030 Agenda on board and have incorporated its principles and values into the university goals, policies, and activities. In fact, the Agenda is an opportunity for universities to rethink the role of higher education institutions and shed light on the convenience of incorporating certain values and practices into their mission from a holistic approach. In fact, there is a growing number of experiences of universities that undertake comprehensive transformation projects to align their institutions with the SDGs as a complex and related whole [23–26]. One example of this is the UPV/EHU's strategic plan (2018–2021) and 2030 agenda for sustainable development [27,28]. This plan describes the contribution to 12 out of the 17 SDGs, along with three sector-based plans (Equality Campus, Inclusion Campus, and Planet Campus); in addition, there is a panel of indicators that tackles the technical aspects for SDG monitoring [29]. Furthermore, given the idiosyncrasy and the location of this university, which maintains and uses an ancestral minority language, Euskara, alongside other languages, such as Spanish and French, this significant linguistic and cultural diversity is added to the 17 SDGs as a further target, called 17 + 1 and referring to the development of *Euskara*, Basque culture, and multilingualism [28].

In the same way, the UB has the *Transition Road Map (environmental and social)* that forms part of the university's strategic plan for 2030 (U30). It proposes the main guidelines on sustainable development and social responsibilities adapted by the institution for the next five years that are specified in 24 commitments for adaptation and transformation of how to work in organisation, research, and training (see Figure 1).

Ultimately, the ESD itinerary has created a culture around sustainability in Higher Education to (a) focus on environmental threats from the perspective of human well-being, equality, peace, etc.; (b) assume an ethical and moral responsibility from universities to progress towards a sustainable society; (c) include sustainable development in study plans, disciplines, projects, etc. (inter- and transdisciplinary approaches); (d) promote research into sustainable development and socially responsible research; (e) make progress on sustainable actions on university campuses; and (f) get universities and sectors of society working together [30]. However, pedagogic innovation is a field of action in which ESD is being developed much more slowly [31].

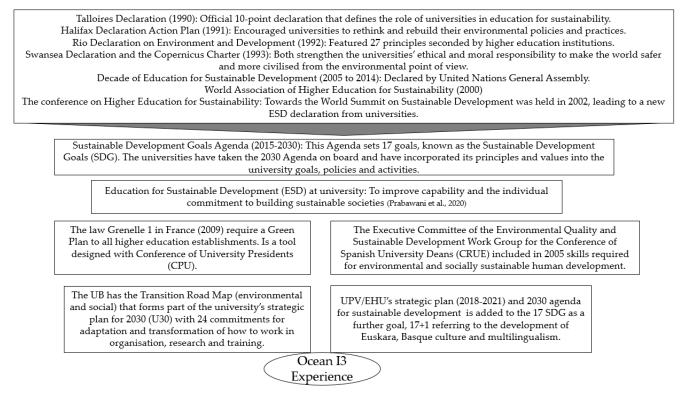


Figure 1. Key documents in the development of the Ocean I3 Experience.

In summary, the need to develop a holistic approach to provide students with highquality education and solve global challenges for the planet is currently recognised. This is based on the premise that national borders should not limit knowledge and innovation, and this requires more cross-border, inter-sector research; exchange of knowledge and collaborative innovation; more student and teacher mobility; and monitoring of the development of global skills. It is under this framework that the educational innovation for sustainability project presented herein is based, conceived, and explained.

3. Ocean I3. An Experience in Educational Innovation for Sustainability

The UPV/EHU is a public university ethically and socially committed to Basque society. Its mission is to train citizens who enjoy good-quality higher education based on knowledge, innovation, and fairness.

It comprises 20 schools and faculties spread over three campuses (Araba, Bizkaia, and Gipuzkoa), and it offers 70 degree programmes and 200 post-graduate programmes in all knowledge areas.

In 2011, the University was recognised as a Campus of International Excellence by the Spanish Ministry of Education, and in 2014, it signed an agreement to work with the UB to create the first Cross-Border Campus of International Excellence in Europe, whose mission is to build a higher education research and innovation space, working with the strategic partners of both universities.

In turn, the University of Bordeaux is a public university that defines itself as open and humanist, a place for freedom, creativity, and responsibility in direct contact with the challenges of society. It has 19 faculties, 50 international training programmes, and 8 doctoral schools, and as a whole, its programmes cover over 50 scientific disciplines. Within this international university framework, Ocean I3 fulfils the purpose of the mission, i.e., the ocean, and the pedagogic model of the UPV/EHU, which combines learning (*Ikaskuntza*), research (*Ikerkuntza*), and sustainability (*Iraunkortasuna*) (three *Is* that provide these concepts in the native Basque language of *Euskara*). Ocean I3 is an interuniversity (UPV/EHU and UB), cross-border international project (Basque-New Aquitaine Coast) that responds to positioning with respect to sustainability and valuation of the oceans and addresses SDG 14 (underwater life), 6 (clean water and sanitation), 4 (quality education), 12 (responsible production and consumption), and, indirectly, 13 (action for climate) on the 2030 Agenda. Ocean I3 slots into the *Bordeaux-Euskampus Euro-Regional Campus for International Excellence*, and it is currently funded by the European Regional Development Fund (ERDF) via the third call for the Spain, France, and Andorra cooperation programme (POCTEFA 2014–2020). Consequently, it is a key project in which students are immersed in a complex learning context to strengthen cross-discipline sustainability and employability competences concerning the cross-border coastline blue economy.

3.1. Conceptual Aspects of Ocean I3

Ocean I3 shapes a complex ecosystem in relation to the following key conceptual aspects: (1) social commitment, (2) active learning, (3) transdisciplinarity, (4) institutionality, (5) territoriality, and (6) employability [32] (see Figure 2).



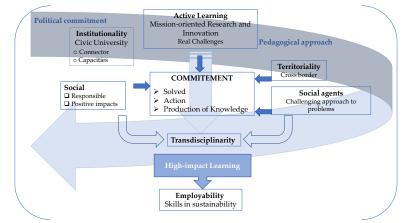


Figure 2. Conceptual aspects of Ocean I3.

(1) Social commitment. The project is conceived from approaches seeking socially distributed innovation as the result of bringing together different collectives with a range of interests and knowledge and where the initiative is not concentrated on a particular collective but is rather more socially distributed [33]. Responsible innovation, socially desirable with positive impacts [34], leads innovation towards creating a Civic University that highlights its role in search of renewed commitment to regional stakeholders and problem issues by promoting teaching and research for public benefit [8].

(2) Active learning. Ocean I3 designs and recreates contexts that promote high-impact learning experiences because it involves student and teacher immersion and commitment to the territory's real problems and issues. The whole community works towards a mission that stimulates increasing collaboration processes between different interdisciplinary stakeholders [6,7]; in this case, the mission is to reduce plastic pollution in the ocean (using the Bay of Biscay and the Basque-Aquitaine coast as a reference), and it is articulated through challenges in which new forms of participation between the public, private, and civil society come together to co-design brand new proposals and solutions when faced with the issue of plastics in the sea. Challenge-based learning is very close to learning based on problems, projects, and service learning. However, challenge-based learning requires a real problem to be solved by means of a specific action, and this is not a problem

designed for the classroom [35]. In fact, the literature compiles the relevance of working on sustainability from the interdisciplinary aspect and methods based on active learning [36].

(3) Transdisciplinarity. Scientific progress often takes place in an interdisciplinary context where traditional disciplinary borders are no longer the main reference [8]. This new way of producing knowledge is characterised as generated in its application context, being transdisciplinary, heterogeneous, organisationally transitory, socially responsible, reflective, etc. All this aims to design contexts that are real learning environments [37], in other words, organising stimulus-rich learning environments which bring about an active learning process [38].

(4) Institutionality. This project has strong institutional backing from both universities, working for them as a connector; *Euskampus Fundazioa* is an entity set up as an inter-institutional add-on to deploy and manage the UPV/EHU Campus of International Excellence project from which the Euskampus Bordeaux Cross-border Campus of International Excellence has been set up with the UB in an attempt to articulate different cultures and capacities for research, training, and transfer between universities. This approach is a clear example of understanding institutions as living organisations that listen to each other, reflect on, and learn from their practices [39]. By supporting Ocean I3, these institutions are demonstrating visionary leadership in sustainability as they take up a position of transdisciplinary collaboration and territorial commitment [40].

(5) Territoriality. This experience fits into a cross-border environment with added international value provided by the confluence of various languages (Basque, French, Spanish, and English as the lingua franca) and cultures [3]. Furthermore, the regions have the peculiarity of sharing a history, culture, and common language that brings about a feeling of brotherhood and belonging to a territory regardless of its borders [41]. Consequently, this leads to commitment not only to cultural aspects but also to the economy of both territories and the actors upholding and promoting it and a commitment to the ocean, in this case, the Bay of Biscay that unites and commits us both.

(6) Employability. International organisations, such as the World Economic Forum, warn that 75% of future professionals still do not know each other [42] and that cross-discipline skills, or soft skills, will be the most sought after in the 21st century [43]. From there, Ocean I3 is working on promoting the development of soft skills for sustainability [44,45] in cross-border contexts [46] with the aim of to helping young people find work in the action territory.

3.2. Ocean I3 Community

The community is structured into the following defined teams and extended workspaces [32,41]:

- Ocean Technical Team (OTT). This takes an active part in project conceptualisation and design; it takes on the facilitator roles between the university community and territorial players, and it resolves organisation and logistical aspects.
- Academic coordination. This includes a reference person from each university who centralises the bond between the teaching teams in each institution, the OTT, and the different university services and organisations.
- International innovation team: Teachers. Made up of teaching and research staff from other universities who tutor the students' experience and support them as they develop skills for sustainability in cross-border environments.
- International student team: Students. Made up of final (4th) year undergraduates and master's students at the UPV/EHU and degree, master's, and university diploma students from UB.
- Social partners. Social actors located in the Basque-Aquitaine territory who are working in the blue economy. For such companies, institutions, and federations, the problem of the contamination of the oceans with plastic is a serious problem that they must address.

In short, the Ocean I3 Community is considered to be an extended community made up of the university community, along with the cross-border public and private territorial actors, who take part at different points in the project by setting challenges, providing feedback to the proposals, and evaluating outcomes. It thereby shapes collaborative and inclusive dynamics, producing knowledge that goes beyond the academic and university field.

3.3. Social Actors from the Territory

Participation, involvement, and commitment from the social actors is key in this project. These are the people who are working on a daily basis for our binding common cause, which is reducing plastics in the ocean. These are the people who are suggesting that the university community should address a situation comprising danger, problems, and injustice as a challenge.

To mention just a few of these social stakeholders, the following can be highlighted:

Surfrider Foundation Europe. Since 1990, Surfrider has been a reference in the fight for the protection of the ocean and its users, with the passion and commitment of its community on the ground [47].

Mater. This is an innovative environmental education centre focused on steering the action of people and communities towards more environmentally friendly ways of life. As a space, MATER is the last wooden tuna vessel that has been transformed into an Ecoactive Museum Boat, and it is now a single union and transformation instrument to raise awareness and involve society in environmental conservation [48].

Arcachon Marine Station. It carries out scientific research into biological oceanography and ecotoxicology [49].

To quantify the social actors and the challenges put forward by them, figures per academic year are shown in Table 1.

Year Group	Social Actors	Challenges
2018/19	3	3
2019/20	16	6
2020/21	15	5

Table 1. Social actors and challenges that have taken part from the 2018/19 academic year to 2020/21.

Source. Own preparation.

As shown throughout the paper, not only do social actors participate in the Ocean I3 experience with the challenge they put forward but also by accepting students on internships and inserting them into the daily work of these companies. By doing so, it must be highlighted that students participate in Ocean I3 through their academic work, contributing to the challenge put forward by social actors; furthermore, some students have opted to participate in internships in these entities during the months that the project is being developed (January/February to June).

3.4. Collaborative Workshops

The internal work carried out by the community is similar to participatory action research in which the community's participation and action is highlighted as a pluralistic orientation towards social change [50]. The methodological strategy that enables the conceptual keys of Ocean I3 to be connected and implemented is via training workshops. In short, the workshops are a strategy that focuses action on know-how and towards comprehensive learning that implies performing an activity [51]. More specifically, five interlinked workshops are offered and characterised by participation, research, collaboration, reflection, and teamwork with the aim of meeting the challenge set by the social actor and bringing it to life with tangible products (capstone, master thesis, work placement report, class tasks, etc.).

The five workshops are interdependent, so they are presented to students as a package that must be completed during the first semester of the year. Involvement, commitments, and regular attendance by the participants (students, teachers, and social actors) are essential. This militancy creates academic and emotional ties that give a sense of belonging to the community (see Figure 3).

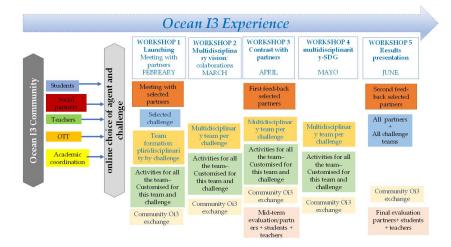


Figure 3. Workshops in Ocean I3.

Collective work through the workshops makes it easier to meet the community in a certain space and time. Although the workshops were designed to take place in person (see example in Figure 4 regarding the first workshop in the 2019/20 academic year, January 2020), the unexpected outbreak of the COVID-19 pandemic meant that the experience of meeting the entire Ocean I3 community in person had to be recreated remotely.



Figure 4. First Ocean I3 workshop in the 2019/20 academic year.

To accommodate and readjust to this situation, the *Gather* social platform was used to recreate a learning scenario as close as possible to an in-person workshop, with worktables for each challenge/social actor around which the students, teachers, and corresponding social actor could all work together (see Figure 5). The collaborative work platforms, *Mural* and *Miro*, were also inserted to jot down ideas, drawings, diagrams, etc., on an online whiteboard in real time, both creatively and collaboratively.

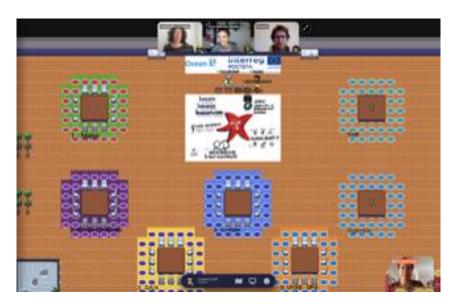


Figure 5. Gather social platform, Ocean I3 workshops in 2020/21 academic year.

Endeavours have been made to make technology an element that adds value and benefits the learning process of the participants in the community rather than being an obstacle. Indeed, literature highlights that the use of technologies, if used meaningfully, fosters the active participation of students [52].

Instead, monitoring student activities between one workshop and another was guaranteed using the *Oktonine* platform, the main asynchronous tool that encouraged individual and collective work online. Thanks to this, in their challenge, each group has enjoyed a space for collaborative teamwork on specific tasks.

4. Purpose and Objectives

The purpose of this paper is to describe and introduce, in quantitative and qualitative terms, the repercussion that this educational innovation project has had since it began as a pilot experience in the 2018/19 academic year to 2020/21 to use this as a springboard to reveal the remaining areas and lines of improvement to make Ocean I3 a real, significant learning environment for its extended community. To be able to provide evidence of this repercussion, the following goals were determined:

- Quantify the academic work produced by students participating in Ocean I3 that was passed by the scientific community (knowledge area and type of work).
- Relate the strategies used with the results obtained in terms of employability.
- Describe teachers' involvement and collaborative work to support and guide students.
- Identify the research groups and study subjects used to investigate the training processes deployed in Ocean I3.
- Determine the outreach actions and channels within society concerning the work performed in Ocean I3.

5. Methodology

In line with the framework provided by the literature and the study goals, an interpretative approach was chosen revolving around an equally qualitative research method [53]. This allows us to penetrate the data content provided by the participants and to use comprehension and reflection of these provisions. The evidence-based dissemination endorses the impact in their key action fields for Ocean I3 [54,55].

This research used an exploratory study. The study object has basically focused on examining the repercussion of Ocean I3 over time to reveal the improvement actions addressed so that the project might provide significant learning environments for the whole community. Exploratory studies are actually used to increase familiarity with relatively unknown phenomena on which there are a great number of questions, obtain information on the possibility of carrying out more complete research, setting priorities for subsequent research, etc. [56]. In the same respect, if the problem has not been addressed before or had been barely studied, it is advisable to choose an exploratory study that makes it possible to stay in contact with the real-life situation that will subsequently be studied in greater depth [57]. Therefore, this work has been approached as an exploratory study in its chronological (the Ocean I3 Community is constantly changing), interpretative (scarce studies previously on the specific study object), and in-depth dimension (with the intention of continuing to investigate with intrusive research instruments).

Considering the exploratory nature and what the literature says about this, the most suitable method to achieve the intended purpose is grounded theory. According to the authors [58], it is exploratory and intended to discover theories, concepts, hypotheses, and proposals working directly from the data inductively. Its validity lies in being applied in new study fields where well-founded concepts are required to describe and explain what is happening.

5.1. Participants

The project began as a pilot experience during the 2018/19 academic year, and 10 UPV/EHU students took part. In 2019/20, 27 students were involved and in 2020/21, 22 students from different faculties from all three campuses (Alava, Bizkaia, and Gipuzkoa). They were following degree courses: Chemical Engineering, Advertising and Public Relations, Biology, Criminology, Law, Pedagogy, French, Nursing, Business Administration and Management, and the master's courses on Secondary Education, Multilingualism, and Socio-Educational Research. It should also be highlighted that in the 2019/20 academic year, one international student from the Erasmus+ programme took part, from Windesheim College Netherlands.

Five students from UB took part in the 2018/19 academic year. In 2019/20, 18 students were involved, and in 2020/21, a total of 16 students took part from degree and post-graduate studies from Ecotoxicology Laboratory EPOC, IFSI Bayonne Nursing, IUT Cs Management Marketing and Economics, and the master's degree in Sports Management— International Master of Projects and Products Action Sports—Sliding Sports (see Table 2).

Year Group	UPV/EHU	UB
2018/19	10	5
2019/20	27	18
2020/21	22	16
Source Own propagation		

Table 2. Participating students from UPV/EHU and UB from the 2018/19 academic year to 2020/21.

Source. Own preparation.

As for the UPV/EHU teaching staff, a total of 14 teachers took part in the 2018/19 academic year; 22 professors tutored students in 2019/20 and 16 in 2020/21.

As for the UB, there were 8 teachers involved in 2018/19, 11 in 2019/20, and 7 in 2020/21 (see Table 3).

Table 3. Participating teachers from UPV/EHU and UB from the 2018/19 academic year to 2020/21.

Year Group	UPV/EHU	UB
2018/19	14	8
2019/20	22	11
2020/21	16	7

Source. Own preparation.

Regarding *Euskampus*, a coordinator and a technician took part in the design and conceptualisation of the project and carried out coordination and technical performance tasks. This entity was also responsible for internal communication throughout the en-

tire community (teachers, students, social actors, etc.) and external communication to disseminate the project's activities and progress to society.

5.2. Information Instruments and Analytical Procedure

As this was a first approximation, what are known as discrete techniques were used to access data, which attempt to find indirect ways of obtaining the necessary data to initially approach the study subject. Discrete measurements can be unusual data sources (graffiti, rubbish, etc.) or virtual (websites, digital fingerprints, etc.). Let us bear in mind that they are non-reactive instruments because they do not involve the research subjects [59,60]. In our case, the data are of public domain, so questions related to ethics in the research are maintained. In this respect, the study uses discrete information measurements, such as information published on the corporate websites of the universities in question, the Ocean I3 project website, and the Euskampus Fundazioa website, along with material drafted by the OTT and the academic coordination and field notes from observations that were systematically recorded as the project was developed [61]. The fact that the authors of this article have access to different collectives and learning contexts has made it easier to involve the participant observation. An interactive method for collecting information that ranges from the involvement of the observers in the events being observed to obtaining perceptions of the real-world situation being studied is difficult to achieve without emotional involvement [62]. See Table 4, which shows the category system followed.

Table 4. Category system.

Category	Sub-Category
	Academic work
Institutional Collaboration	International internships
	Social diffusion
	Problems
Teaching Collaboration	Research-Action Method
	Solutions
	Multilingualism
	Inter-Culturality
Research	Skills for sustainability
	Design of Significant Environments for Learning

Source. Own preparation.

Regarding the analytical procedure, it has represented a basically inductive, dynamic, and systematic process that has involved identifying, selecting, categorising, comparing, and interpreting [63]. For this purpose, dimensions have been created to order the information that has been collected via the different instruments and to identify key elements and explore their connections.

6. Results

The results are a demonstration of the repercussion, in both quantitative and quantitative terms, that Ocean I3 is developing in relation to the tangible products achieved. This will be considered the footprint being left on the territory's business fabric, the teaching coordination work of the inter-university teaching staff, the current lines of research to support the processes generated within the project, and the project's repercussion in the media and on social media.

6.1. Repercussion in Terms of the Students' Academic Products

Given the diversity of the activities through which the students can take part in Ocean I3, i.e., capstone, master's thesis, doctoral dissertations, work placement reports, course projects and papers, etc., the effect of participating in Ocean I3 in terms of academic projects/papers will be shown below.

Only UPV/EHU has contributed capstones to the project, according to the curriculum design for Spanish university degrees. The capstone is a dissertation produced by each student, guided by a tutor, who acts as a facilitator for the learning process. It must be an original piece of work, and the student and the tutor decide on both the content and the method together. Within the various degrees, the credit weighting of this work can range between 6 and 18 ECTS credits. The common denominator for all degrees is that the capstone must be passed to gain the degree qualification and, therefore, to be able to work in the corresponding profession. In the case of master's thesis, the UPV/EHU and UB have provided equal numbers of products, and as in the previous case, it is an essential requisite to obtain the official master's degree.

As far as doctoral dissertations are concerned, we can allude to all of them participating in Ocean I3 because the project was part of their fieldwork scenario due to collecting timely information in the community, contrasting data, etc. In short, the doctoral candidates were involved in the project in one way or another. These ongoing dissertations are not yet finished.

Regarding the work placement reports, they compile the students' learning process carried out in the territory's professional entities (curricular or extra-curricular work placements). Finally, the papers and projects that various teachers from the degree courses at the UB and the UPV/EHU have proposed for their students to pass the course are also included.

In general terms, 90 academic papers have been associated with the project, directly addressing the problem of reducing plastic in the sea. The distribution of these papers is shown in Table 5.

	Ocean I	3	
	18/19	19/20	20/21
Capstone	9	14	14
Master thesis	3	3	1
Doctoral dissertations		2	1
Post doc papers		1	
Work placement reports	3	8	16
Course papers	2	6	7

Table 5. Academic products written by students from UPV/EHU and UB from the 2018/19 academic year to 2020/21.

Source. Own preparation.

As shown in Table 4, during the 2018/19 academic year, the students from both universities produced nine capstone projects, three master's theses, three work placement reports, and two course papers.

In the 2019/20 academic year, there were 14 capstone projects, 3 master's theses, and 6 course papers. The papers represented research work that has contributed with knowledge and methodological proposals to the challenges broached over that academic year and set by the territory's stakeholders. As a pilot, and unusually, two academic tribunals were also set up for the capstone defence, including a Contrast and Evaluation Committee with actors outside the university. Finally, four students completed voluntary work placements associated with the project, thereby developing competences bound to the blue economy in a real-life situation.

Regarding the UB, the projects put the students in direct contact with the territory's socio-economic stakeholders. They backed them by transferring the outcomes of their work to improve their employment prospects in the coastal blue economy. Two doctorate research projects and one post-doc project were carried out, both associated with the EPOC laboratory and its ecotoxicology capacities with specific needs set by territorial stakeholders in their challenges on water quality and awareness-raising among the public through citizen science. One master's thesis provided results that will be applied in future

awareness-raising actions, and four work placement contracts were carried out bound to real problems in the blue economy.

In terms of the 2020/21 academic year, 14 capstone projects, 1 master's thesis, and 7 course papers are about to be completed. As for dissertations, Ocean I3 continues to be the empirical field for a doctoral dissertation, and a significant effort has been made to strengthen ties with the business world through work placements. From there, 16 internship reports have been written, specifying the tasks performed to reduce plastic in the sea.

In addition to the individual products, the number of collective papers that meet the challenges set by the social actors were: three in the 2018/19 academic year, six in 2019/20, and five in 2020/21. A total of 14 collective, transdisciplinary, multilingual projects fulfilled the needs of the cross-border territory players.

6.2. Repercussion in Terms of Employability

The concept of employability refers to the capacity to adapt our circumstances (personal and professional capabilities and skills) to the needs of the job market. Consequently, the Ocean I3 employability plan puts students in direct contact with the territory's socioeconomic actors through individual academic papers and the collective challenge that this meets as well as practices that they can perform within the project.

Papers based on research and community action emphasise the relationship between the two universities and the territory entities with missions bound to sustainability and reducing plastic in the sea. They are aimed at finding out together about the skills required by the job market that improve students' employment opportunities in the world of the coastal blue economy.

Work placements, some of which were paid, allowed students to take part in entities and develop skills related to the blue economy. Their immersion in these cross-border entities and their involvement as future professionals in issues related to plastic polluting the oceans support developing skills associated with this specific context by deeply activating the focus that has been named as on-going blue skills. In short, it can be highlighted that 27 work placement contracts with social entities based in the Basque-Aquitaine territory and related to the sea were signed in this short period of time (see Table 6).

Table 6. Work placement contracts for students from the UPV/EHU and UB as entities based in the Basque-Aquitaine territory from the 2018/19 academic year to 2020/21.

Year Group	UPV/EHU	UB			
2018/19	1	2			
2019/20	4	4			
2020/21	5	11			
Source Own proparation	Source Our proposition				

Source. Own preparation.

In turn, Euskampus has been an exceptional ally when coordinating the employability plan. This catalyst entity plays an important role when identifying, contacting, and involving public and private social actors from the cross-border territory to work with Ocean I3.

6.3. Repercussion in Terms of Coordinating Teaching Teams

Experience tells us that involving university teachers in innovation is no easy task. Each university has deployed its own strategies to seek complicity from the teachers. In the case of the UPV/EHU, they were brought together through each faculty's executive team. Teachers who voluntarily wished to take part in the project presented the experience to their students, making use of different resources such as the following: (a) offer of topics for research, intervention, systematic review of the literature, etc., to develop the capstone project or master's thesis; (b) practical work on the course associated with the Ocean I3 project; and (c) offer for external work placements.

In turn, the UB has brought together teachers via (a) the centre's management teams, (b) prior collaborations on summer courses, and (c) other activities developed by the university bound to valuation and sustainability of the oceans. Teachers have given their students research topics for course papers, master's theses, work placements, etc., associated with the project's central theme.

In the last academic year, 2020/21, 22 teachers have been working together in an international educational innovation experience based on the research-action method. These teachers have been grouped into four working sub-groups to respond to the internal issues identified during previous academic years in Ocean I3. Each subgroup is led by a coordinator who provides guidelines for the goals, sets the workplace, and runs the meetings. This leader also takes part in the research group made up of the four subgroup leaders and the general coordinator who provides guidelines for the procedural directives to address these investigations linked to the detected needs in a similar and collaborative way. However, each leader has complete freedom to manage their group with their own tools and guidance. Table 7 below compiles the four teams of teachers formed to address each of the identified problems around which the work was based and the solutions found.

Ocean I3 Teacher Teams		
Team	Problem and Solutions	
Team 1	Problem: there is no official teaching documentation (programmes, guides, etc.) that, according to the degrees and universities, compiles the specifics and the conditions for students to take part in Ocean I3.	
	Solution: (1) identification of the types of jobs and/or subjects related to the Ocean I3 project, (2) identification of academic procedures in each centre/discipline with respect to the syllabus, (3) creation of a proposed syllabus for the student in each subject, and (4) drawing up of guidelines and recommendations to adapt future syllabus.	
Team 2	Problem: there is no first-hand knowledge of Ocean I3's contribution to employability in the territory.	
	Solution: collect a testimonial document giving the strengths and weaknesses of Ocean I3 concerning students' employability.	
Team 3	Problem: there is no rigorous work on entities that might potentially be interested in taking part in Ocean I3 and how to get them to define their challenges.	
	Solution: (1) map the territory's socio-economic players that might be interested in taking part in Ocean I3 and (2) design a prototype to nurture challenges.	
- Team 4	Problem: lack of alliances to keep growing as a community and improving as a project.	
	Solutions: (1) project identification that combines education for sustainability and methodological practices for active learning on other levels, particularly in the nine universities that make up the <i>Enlight European University</i> and (2) contact with the most suitable people to establish future collaborations (the last one is yet	

Table 7. Inter-university-international teaching teams, 2020/21 academic year.

Source. Own preparation.

to be realised).

The four teaching teams have addressed the problems through managing and promoting collaborative research work between the teachers, obtaining the solutions set out in Table 7. It must not be forgotten that everything has revolved around the reduction of plastic in the sea.

Regarding Euskampus, it has mainly contributed from the area of communication, coordination, and technical execution. It identifies and contacts benchmark research professors in the cross-border projects of the Euskampus Bordeaux Campus who will be involved in Ocean I3. It supports forming these inter-university-international teaching groups.

6.4. Repercussion in Terms of Involvement of Recognised Research Groups

Ocean I3 is supported by two research groups: *DREAM* and *IkasGura*, that monitor aspects related to the use of languages and pedagogic issues.

The DREAM research group (Donostia Research Group on Education and Multilingualism) is working continuously with Euskampus on the multilingualism and interculturality study. Working from observation and learning acquired in other multilingual contexts, they have drawn up guides, protocols, and recommendations that help highlight and activate cross-discipline skills in interculturality and multilingualism that are so important for cross-border employment. In addition, they support, assess, and accompany throughout the training process by observing the multilingual dynamics to facilitate them, raising awareness on the linguistic diversity addressed and protecting Basque as a minority and co-official language of the UPV/EHU [64].

Regarding *IkasGura* (Educational Change in the University), it has devised two questionnaires, one for students (called *IraunIK*) and another for teachers (*IraunIR*), that compiles their perception of the skills and the learning outcomes developed by the students in Ocean I3. They were validated for content and reliability statistics, but they can be transferred to other learning for sustainability environments. This work was carried out to define a graduate profile that meets the demands of the cross-border blue economy and that revolves around sustainability, thereby positioning the participating universities as active stakeholders within the configuration of our territory's employability. This actually refers to moving beyond the binary logic of supply and demand for skills. What it thereby proposes are significant learning contexts for the whole university community giving the opportunity to implement skills identified by *IkasGura*, adjusting them to the learning process with and in the field of the blue economy [65].

6.5. Repercussion in Terms of Social Dissemination

The communication actions have been led by Euskampus, and its activity has been essential for the project. Regarding communication and internal dissemination, they have been key in bringing in participating students from both universities, involving the fabric of the territory's social and economic actors and presenting the outcomes from the joint work project. Regarding social dissemination, it is currently essential to keep this aspect in mind to reach students and society in general. In fact, to address this goal, Euskampus contracted two work placement students to draw up an internal and external communication plan for the project, setting up its own website, opening and running social media accounts, etc., to spread the word on events and results for the project. However, Ocean I3 has also been mentioned in the press and on television, which have both been very useful to disseminate the project (see Table 8).

In fact, the external communication actions highlight the papers drawn up by the students in the light of the cross-border blue economy employment agents and help to make them visible and available to citizens in general. However, we are aware that this communication is fluid, like seawater. It can be channelled but not directed, so it must be borne in mind and must not be neglected. However, this media dissemination and deployment is interpreted as a guarantee of the project's sustainability in so far as the students are attracted via social media, the social actors obtain visibility regarding their work in favour of the environment, fostering formal and informal awareness of the extended communication but particularly to raise the visibility of the work carried out to reduce plastic in the sea.

Field	Action	Link	
	SudOuest	https://www.sudouest.fr/2019/03/18/le-fil-bleu-de-l-ocean-5906 925-6527.php?nic (accessed on 30 July 2021)	
Press and television	SudOuest	https://www.sudouest.fr/politique/education/pays-basque-l- ocean-franchit-les-frontieres-malgre-le-covid-19-1929203.php (accessed on 30 July 2021)	
	TV7 Bordeaux	https://www.sudouest.fr/lachainetv7/emissions/cap-sur- leuroregion/videos/2021/04/22/q0mzxlk (accessed on 30 July 2021)	
	Facebook	https://www.facebook.com/oceanitres/ (accessed on 30 July 2021)	
Social Media	YouTube	https://www.youtube.com/watch?v=8u7gvluITZU (accessed o July 2021)	
	Twitter	https://twitter.com/I3Ocean (accessed on 30 July 2021)	
	WEBSITE	https://oceani3.com/ (accessed on 30 July 2021)	
Academic forums	Virtual National Seminar on the Atlantic Strategy to Promote the Blue Economy in the Atlantic: Training and Skills Strategy (May 2020)	https://oceani3.wixsite.com/oceani3/post/seminario-nacional- virtual-atl%C3%A1ntico (accessed on 30 July 2021)	
	Accelerating Education for the SDGs in Universities: A guide for universities, colleges, and tertiary and higher education institutions (July 2021)	Ocean I3 has been incorporated as a good practice case by the UN Sustainable Development Solutions Network (SDSN). https://resources.unsdsn.org/accelerating-education-for-the-sdgs- in-universities-a-guide-for-universities-colleges-and-tertiary-and- higher-education-institutions (accessed on 30 July 2021)	

Table 8. Ocean I3 actions for communication and external dissemination.

Source. Own preparation.

7. Discussion

The results lead us to ask to what extent Ocean I3 might manage to be a significant learning environment for the extended community in which it acts.

Ocean I3 contributes to the strategic plan (2018–2021) and the 2030 agenda for sustainable development from the UPV/EHU [29] and the *Road Map for Transitions* (environmental and social) from the UB's strategic plan, giving meaning and bringing out the sustainability in tangible actions aligned with proposals by international organisations and with similar strategies applied at universities in other places [23–26].

Ocean I3 is a reflection of the social and cultural commitment of both universities to territorial actors and problem issues that does not marginalise students or teachers but involves them by promoting active teaching and research with a direct impact benefiting the public and local aspect, although from a global and planetary perspective, in line with claims in the literature [8].

In Ocean I3, the whole community is focused on a mission to "reduce plastic pollution in the ocean" that stimulates ascending collaboration processes between different stakeholders [6,7] by activating collective and individual reflection workshops that cross the disciplinary borders [40], producing knowledge in the actual context of the application [8].

Ocean I3 creates a significant learning environment for the students because actions are raised on which the students have to show they knowledge, skills, and presence of mind [30], monitoring their cross-discipline skills for sustainability and highlighting their impact with a view to the ambiguous scenario represented by the current job market.

It is true that the innovative part of this project is not the methodology in itself given that it has been proven that the methodologies in use in higher education are those that are mainly implemented for the development of sustainability skills [1]. The really innovative thing is the complex context in which the project has been developed, in which two majority languages (French and Spanish), one minority language (Basque), and one lingua franca (English) interact under very different circular structures and with paces and academic calendars that do not always coincide. In spite of all this, understanding and the force of the common mission unite us: the reduction of plastic on the Basque-Aquitaine coast has overcome these differences.

8. Conclusions

From the 2018/19 academic year to the present day, 98 students, around 30 teachers and 34 territorial actors from either side of the border have worked closely together on 14 real challenges, leading to 27 work placement contracts bound to the cross-border coastal blue economy. The individual and collective work that has addressed reducing plastic in the sea has helped them obtain the certification that endorses university students as professionals in different study areas. They are environmentally aware professionals and citizens who are qualified to work from a sustainable approach.

In addition, the work placements are making their mark on the cross-border entities bounded to the blue economy and boosting university students' employability.

Teachers are a key part of this scheme because they identify first-hand the faults, gaps, and parts that do not fit in the project. From there, it is a short step to seek the teachers' complicity to investigate the project's internal problems, guarantee their involvement, and demonstrate their commitment to making improvements and high-quality teaching.

The work of the research groups has rigorously, systematically, and validly addressed two study subjects (the use of languages in multilingual environments and development of cross-discipline skills for sustainability) that are key to tackle the project's development with good sense and future perspective.

The media in general and social media in particular have boosted greater interaction and communication with citizens and fluid, fast, and close accessibility with the project status. This deployment is a sign of the interest generated by the project and its results.

The constraints faced each year by Ocean I3 are those derived from its hallmark:

- The complexity of working in an international environment with languages that one does not always have a good command of;
- The design of actions that are suited to the different curricular structures of both universities;
- Addressing the challenges from a transdisciplinary approach is not always easy;
- The identification and relations with social actors to commit to this process;
- Attracting students who wish to voluntarily get involved in this experience through the different methods; and
- Training and commitment by the teachers involved.

The obstacles faced in this study focus specifically on those derived from the research instruments used. In order to be coherent with the purpose and objectives of the study, they have provided us with superficial and non-intrusive information regarding the Ocean I3 innovation experience.

As far as the areas and lines of improvement are concerned, it should be added that:

- The differential contribution of the Ongoing blue skills approach must design a guide that allows it to be methodologically transferred to other contexts where the three sides of the pyramid are: (1) the now—current learning context (mission and challenge);
 (2) the immediate future—job seeking; and (3) the itinerant process of developing skills—cross-discipline for sustainability and employability;
- The university community abandons old disciplinary approaches. Training on transdisciplinary approaches is a challenge that remains in the project but that should be worked on to provide a multifaceted response to the challenges of the cross-border business world.
- Identification of the set of cross-border stakeholders that make it possible to structure a bank of future challenges and a wider bank of work placements that are the basis for dissemination of professional opportunities for the cross-border blue economy among students from both universities.

In summary, future lines of progress should focus on continuing to investigate the emerging pedagogic innovations that the Ocean I3 constantly requires for the purposes of responding sensibly to the ESD from its territorial, transdisciplinary, multilingual, and multicultural dimension.

Author Contributions: All co-authors contributed equally to the design, implementation, conduct of research and analysis of data and the delivery of main findings. All authors have read and agreed to the published version of the manuscript.

Funding: This research received external funding. The *Ocean 13 project. Blue skills to develop the blue economy on the Basque-Aquitaine cross-border coast* was jointly financed by the European Regional Development Fund (ERDF) through the Spain-France-Andorra cooperation programme (POCTEFA 2014–2020) set up by the European Union. The aim of the project is to strengthen skills and inclusion within the territories.

Institutional Review Board Statement: Ethical review and approval were waived for this study, due to not involving personally identifiable nor sensitive data.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data is contained within the article. Additional data are available on request from the corresponding author.

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

References

- 1. Evans, T.L. Competencies and pedagogies for sustainability education: A roadmap for sustainability studies program development in colleges and universities. *Sustainability* **2019**, *11*, 5526. [CrossRef]
- 2. Harguindéguy, J.B. La Frontière en Europe: Un Territoire? Coopération Transfrontalière Franco-Espagnole; L'Harmattan: Paris, France, 2007.
- Cenoz, J.; Gorter, D. Focus on multilingualism as an approach in educational contexts. In *Heteroglossia as Practice and Pedagogy*; Springer: Dordrecht, The Nertherlands, 2014; pp. 239–254.
- 4. Byram, M.; Fleming, M. Language Learning in Intercultural Perspective: Approaches through Drama and Ethnography; Cambridge University Press: Cambridge, UK, 1998.
- 5. Gibbons, M.; Limoges, C.; Nowotny, H.; Schwartzman, S.; Scott, P.; Trow, M. *The New Production of Knowledge: Science and Research in Contemporary Societies*; SAGE Publications Ltd.: Thousand Oaks, CA, USA, 1997.
- Mazzucato, M. Mission-Oriented Research & Innovation in the European Union. A Problem-Solving Approach to Fuel Innovation-Led Growth; European Commission: Brussels, Belgium, 2018; Available online: Ec.europa.eu/info/sites/info/files/mazzucato_ report_2018.pdf (accessed on 15 May 2020).
- Sachs, J.D.; Schmidt-Traub, G.; Mazzucato, M.; Messner, D.; Nakicenovic, N.; Rockström, J. Six transformations to achieve the sustainable development goals. *Nat. Sustain.* 2019, 2, 805–814. [CrossRef]
- 8. Goddard, J.; Vallance, P.; Kempton, L. The civic university: Connecting the global and the local. In *Universities, Cities and Regions Loci for Knowledge and Innovation Creation*; Capello, R., Gorzelak, G., Olechnicka, A., Eds.; Routledge: London, UK, 2012.
- Agut, M.P.M.; Minguet, P.A.; Solís, M.Á.U.; Guilamany, A.P. Promoción de la sostenibilidad en los currícula de la enseñanza superior desde el punto de vista del profesorado: Un modelo de formación por competencias. *Educ. Siglo XXI* 2007, 25, 187–208.
- 10. Rieckmann, M. Future-oriented higher education: Which key competencies should be fostered through university teaching and learning? *Futures* **2012**, *44*, 127–135. [CrossRef]
- 11. Prabawani, B.; Hadi, S.P.; Zen, I.S.; Afrizal, T.; Purbawati, D. Education for sustainable development as diffusion of innovation of secondary school students. *J. Teach. Educ. Sustain.* 2020, 22, 84–97. [CrossRef]
- 12. Knapp, D. The Thessaloniki declaration: A wake up call for environmental education? J. Environ. Educ. 2000, 31, 32–39. [CrossRef]
- 13. Wright, T.S. A tenth year anniversary retrospect: The effect of the Halifax declaration on Canadian signatory universities. *Can. J. Environ. Educ.* **2003**, *8*, 235–248.
- 14. Herremans, I.M.; Reid, R.E. Developing awareness of the sustainability concept. J. Environ. Educ. 2002, 34, 16–20. [CrossRef]
- 15. Stubbs, W. Addressing the business sustainability nexus in postgraduate education. *Int. J. Sustain. High. Educ.* **2013**, *14*, 25–41. [CrossRef]
- 16. Leicht, A.; Combes, B.; Byun, W.J.; Agbedahin, A.V. From Agenda 21 to Target 4.7: The development of education for sustainable development. In *Issues and Trends in Education for Sustainable Development*; UNESCO Publishing: Paris, France, 2018; p. 25.
- 17. Corcoran, P.; Calder, W.; Clugston, R. Introduction: Higher education for sustainable development. *High. Educ. Policy* **2002**, *15*, 99–103. [CrossRef]

- CRUE. Directrices Para la Introducción de la Sostenibilidad en el Curriculum. Documento Aprobado por el Comité Ejecutivo del Grupo de Trabajo de Calidad Ambiental y Desarrollo Sostenible de la CRUE–Revisado y Actualizado en Marzo de 2011; CRUE: Planta, Madrid, 2012; Available online: www.crue.org/Documentos%20compartidos/Declaraciones/Directrices_Sostenibli-dad_Crue2012.pdf (accessed on 30 March 2021).
- CRUE. Manifiesto de CRUE Universidades Españolas por un Planeta Más Sostenible; CRUE: Planta, Madrid, 2019; Available online: www.crue.org/2019/12/manifiesto-de-crue-universidades-espanolas-por-un-planeta-mas-sostenible-diciembre-2019 (accessed on 29 July 2021).
- 20. Aznar, P.; Ull, M.A. La formación de competencias básicas para el desarrollo sostenible: El papel de la Universidad. *Rev. Educ.* **2009**, 219–237. Available online: www.revistaeducacion.educacion.es/re2009/re2009_10.pdf (accessed on 30 July 2021).
- 21. CPU. *Climat et Développement Durable*; CPU: Paris, France, 2009; Available online: www.enseignementsup-recherche.gouv.fr/pid3 6701-cid117156/www.enseignementsup-recherche.gouv.fr/cid117156/le-m.e.s.r.i-et-le-developpement-durable.html (accessed on 30 July 2021).
- UN. Transforming Our World: The 2030 Agenda for Sustainable Development, A/70/L.1; UN: New York, NY, USA, 2015; Available online: www.un.org/ga/search/view_doc.asp?symbol=A/70/L.1&Lang=E (accessed on 30 July 2021).
- 23. Leal Filho, W.; Pallant, E.; Enete, A.; Richter, B.; Brandli, L.L. Planning and implementing sustainability in higher education institutions: An overview of the difficulties and potentials. *Int. J. Sustain. Dev. World Ecol.* **2018**, 25, 713–721. [CrossRef]
- 24. Mawonde, A.; Togo, M. Implementation of SDGs at the University of South Africa. *Int. J. Sustain. High. Educ.* **2019**, *20*, 932–950. [CrossRef]
- 25. Mori, R.; Fien, J.; Horne, R. Implementing the UN SDGs in Universities: Challenges, opportunities, and lessons learned. *Sustainability* **2019**, *12*, 129–133. [CrossRef]
- Paletta, A.; Bonoli, A. Governing the university in the perspective of the United Nations 2030 Agenda: The case of the University of Bologna. Int. J. Sustain. High. Educ. 2019, 20, 500–514. [CrossRef]
- 27. University of the Basque Country. UPV/EHU Strategic Plan. 2018–2021. Available online: www.ehu.eus/es/web/idazkaritzanagusia/upv-ehuren-plan-estrategikoa-2018-2021 (accessed on 17 February 2021).
- University of the Basque Country. EHU Agenda for Sustainable Development; University of the Basque Country: Vizcaya, Spain, 2019; Available online: www.ehu.eus/documents/4736101/11938005/EHUAgenda-2030-ENG.pdf/487b2c83-51e1-d0e2-dcd1 -af419b2b5c26 (accessed on 17 February 2021).
- 29. Sáez de Cámara, E.; Fernández, I.; Castillo-Eguskitza, N. A holistic approach to integrate and evaluate sustainable development in higher education. The case study of the University of the Basque Country. *Sustainability* **2021**, *13*, 392. [CrossRef]
- Wright, T.S. Definitions and frameworks for environmental sustainability in higher education. *High. Educ. Policy* 2002, 15, 105–120. [CrossRef]
- Armstrong, C.M. Implementing education for sustainable development: The potential use of time-honored pedagogical practice from the progressive era of education. *J. Sustain. Educ.* 2011, 2. Available online: www.susted.com/wordpress/content/ implementing-education-for-sustainable-development-the-potential-use-of-time-honored-pedagogical-practice-from-theprogressive-era-of-education_2011_03/ (accessed on 30 July 2021).
- 32. Barrenechea, J.; Alkorta, I.; Herrera, S. Ocean I3: Proyecto internacional de innovación educativa para la sostenibilidad del océano—Campus Ocean, University of the Basque Country (UPV/EHU) and University of Bordeaux. In III Congreso EuroSoTL: Explorando Nuevos Campos a Través de un Enfoque Académico de la Enseñanza y el Aprendizaje; UPV/EHU: Biscay, Spain, 2019; Available online: www.ehu.eus/documents/8301386/10560621/Actas-EuroSoTL-Conference-2019.pdf/1a7d5867-e222-4aab-6f92-a7948f1fbd67?t=1560417459000 (accessed on 15 May 2021).
- 33. Arocena, R.; Sutz, J. La Universidad Latinoamericana del Futuro Tendencias—Escenarios—Alternativas; UDUAL (Unión de Universidades de América Latina): Ciudad de México, México, 2001; Available online: https://www.documentos.una.ac.cr/bitstream/handle/unadocs/8131/La%20Universidad%20Latinoamericana%20del%20Futuro_Arocena-Sutz.pdf?sequence=10 &isAllowed=y (accessed on 30 July 2021).
- 34. Owen, R.; Macnaghten, P.; Stilgoe, J. Responsible research and innovation: From science in society to science for society, with society. *Sci. Public Policy* **2012**, *39*, 751–760. [CrossRef]
- 35. ITESM-Instituto Tecnológico y de Estudios Superiores de Monterrey. Observatorio de Innovación Educativa. *Aprendizaje Basado en Retos–EduTrends*. 2016. Available online: Observatorio.itesm.mx (accessed on 15 May 2021).
- 36. Dale, A.; Newman, L. Sustainable development, education and literacy. Int. J. Sustain. High. Educ. 2005, 6, 351–362. [CrossRef]
- 37. Oser, F.K.; Baeriswyl, F.J. Choreographies of teaching: Bridging instruction to teaching. In *Handbook of Research on Teaching*; Richardson, V., Ed.; AERA: Washington, DC, USA, 2001; pp. 1031–1065.
- 38. Zabalza, M.A.; Zabalza, M.A. Coreografías didácticas institucionales y calidad de la enseñanza. Linhas Críticas 2019, 25. [CrossRef]
- 39. Gairín, J. Cambio de cultura y organizaciones que aprenden. Educar 2000, 27, 31-85.
- 40. Evans, T.L. Transdisciplinary Collaborations for Sustainability Education: Institutional and intragroup challenges and opportunities. *Policy Futures Educ.* **2015**, *13*, 70–96. [CrossRef]
- 41. Alkorta, I.; Barrenechea, J.; Herrera, S.; Lamarche, M.; Dereamat, M.; Rekalde, I. Plataforma Transfronteriza ZUZENBIDEOCEAN, una Propuesta de Comunidad Ampliada de Aprendizaje y Yalorización. In *Conferencia Internacional Red-U. Universidad y Desarrollo Sostenible: Experiencias de Aprendizaje que Comprometen el Futuro*; 2017; Available online: Red-u.org/archivos/actas_jornadas_2017.pdf (accessed on 15 May 2021).

- Stefanova, V.; Leopold, T. 5 Things to Know about the Future of Jobs; World Economic Forum.: Cologny, Switzerland, 2018; Available online: www.weforum.org/agenda/2018/09/future-of-jobs-2018-things-to-know/ (accessed on 30 July 2021).
- OECD. The OECD's Work on Education and Skills; OECD: Paris, France, 2019; Available online: www.oecd.org/edu (accessed on 15 May 2021).
- 44. Barth, M.; Godemann, J.; Rieckmann, M.; Stoltenberg, U. Developing key competencies for sustainable development in higher education. *Int. J. Sustain. High. Educ.* 2007, *8*, 416–430. [CrossRef]
- 45. Murga-Menoyo, M.A. Competencias para el desarrollo sostenible: Las capacidades, actitudes y valores meta de la educación en el marco de la Agenda global post—2015. *Foro Educ.* **2015**, *2*, 55–83. [CrossRef]
- Rekalde-Rodríguez, I.; Madinabeitia, A.; Ovelar, R.; Eizagirre, A.; Pizarro, J.L. ¿En qué medida las experiencias universitarias transfronterizas ayudan en el desarrollo de competencias transversales? Un estudio cualitativo. Márgenes Rev. Educ. Univ. Málaga 2021, 2, 79–102. [CrossRef]
- 47. Surfrider Foundation Europe. Available online: http://surfrider.eu (accessed on 30 July 2021).
- 48. Mater. Available online: https://www.mater.org.au (accessed on 30 July 2021).
- 49. Marine Station of Arcachon. Available online: www.epoc.u-bordeaux.fr/ (accessed on 30 July 2021).
- 50. Reason, P.; Bradbury, H. (Eds.) *The Sage Handbook of Action Research: Participative Inquiry and Practice;* SAGE Publications Ltd.: Thousand Oaks, CA, USA, 2008.
- 51. Ander-Egg, E. *El Taller: Una Alternativa de Renovación Pedagógica;* Arocena, R., Sutz, J., Eds.; Magisterio Río de La Plata; La Universidad Latinoamericana del Futuro Tendencias–Escenarios-Alternativas; UDUAL | Unión de Universidades de América Latina: Ciudad de México, Mexico, 2001.
- 52. Daniela, L.; Visvizi, A.; Gutiérrez-Braojos, C.; Lytras, M.D. Sustainable higher education and technology-enhanced learning (TEL). *Sustainability* **2018**, *10*, 3883. [CrossRef]
- 53. Taylor, S.J.; Bogdan, R. Introduction to Qualitative Research Methods: A Guidebook and Resource, 6th ed.; Wiley: Hoboken, NJ, USA, 1998.
- 54. Flick, U. An Introduction to Qualitative Research; SAGE Publications Ltd.: Thousand Oaks, CA, USA, 2004.
- 55. Grundy, S. Currículum: Product or Praxis; University of New England: Biddeford, ME, USA, 1991.
- 56. Hernández, R.; Fernández, C.; Baptista, P. Metodología de la Investigación; McGraw-Hill: New York, NY, USA, 2003.
- 57. Ferreyra, A.; De Longhi, A.L. Metodología de la Investigación I; Encuentro Grupo Editorial: Madrid, Spain, 2014.
- 58. Glaser, B.G.; Strauss, A.L. Discovery of Grounded Theory: Strategies for Qualitative Research; Routledge: London, UK, 2017.
- 59. Lee, R.M. Unobtrusive Methods in Social Research; Open University Press: Buckingham, UK, 2000.
- 60. Webb, E.J.; Campbell, D.T.; Schwartz, R.D.; Sechrest, L. *Unobtrusive Measures*; SAGE Publications Inc.: Thousand Oaks, CA, USA, 2000.
- 61. Rekalde, I.; Vizcarra, M.T.; Macazaga, A.M. Observation as a research strategy for building learning context and encouraging participatory processes. *Educación XX1* 2014, *17*, 199–220. [CrossRef]
- 62. Rodríguez, G.; Gil, J.; García, E. Metodología de la Investigación Cualitativa; Aljibe: Chicago, IL, USA, 1996.
- 63. Coffey, A.; Atkinson, P. Making Sense of Qualitative Data; SAGE Publications Ltd.: Thousand Oaks, CA, USA, 1996.
- 64. DREAM. Donostia Research Group on Educacion and Multilingualism. 2021. Available online: www.ehu.eus/es/web/multilingualism/home (accessed on 30 July 2021).
- 65. IkasGura. Research Group. IkasGura: Educational Change in the University. 2021. Available online: www.ehu.eus/en/web/ ikasgura/definizioa-eta-helburua (accessed on 30 July 2021).