

Article

Integrating SDG 12 into Business Studies through Intercultural Virtual Collaboration

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Abstract: Intercultural Virtual Collaboration (IVC) has been a growing field in recent decades as it allows students from different cultures to work together without having to move physically. Besides providing students with an authentic experience that they are going to encounter in their future professional careers in increasingly globalised and digitised workplaces, more recently, IVC has also been used as a means to engage university students from different cultures in social and political issues that are common across societies. In this paper, we present an analysis of an IVC project that involved undergraduate Business students from a university in Spain and a university in the Netherlands where students from both universities were asked to collaborate online to develop a business case to analyse how companies communicate about the way they integrate SDGs in the different cultures involved. A content analysis of group reports delivered by students was carried out. In addition, intercultural competence development was measured through a questionnaire. Results show that the IVC project contributed to raising students' awareness of how companies approach SDGs and adapt their products to different cultures. Students were also perceived to have developed intercultural knowledge, intercultural virtual teamwork, intercultural attitudes and intercultural awareness.

Keywords: higher education; sustainable development goals; business studies; intercultural virtual collaboration; business case; global virtual teams; virtual exchange



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1. Introduction

The business world is increasingly recognising that sustainability and sustainable development are worldwide challenges in the 21st century [1], profoundly impacting higher education's teaching and learning environment [2–9]. Education for Sustainable Development (ESD) and Global Citizenship Education (GCE) is reflected in target 4.7 of the 17 Sustainable Development Goals (SDGs) of the United Nations (UN) Agenda 2030 [10]. Based on UNESCO recommendations, educational programmes in higher education in terms of curricula and methods should innovate and provide ESD to equip future generations of citizens towards sustainability [4,11]. Substantial efforts in reforming the curricula with new approaches in order to integrate sustainability in the programs and modules become a responsibility of educators in business schools and higher education institutions [12–14]. Likewise, students also should become better informed and conscious of their impact as citizens in the interconnected world [11,14]. In this universe, the research interest in Responsible Management Education (RME) has accelerated in the last decade to raise students' awareness of the importance of balancing economic growth and sustainability [12] Nevertheless, as Storey, Killian and O'Regan [15] defend, "the field of RME is quite crowded" (p. 102), as embedding SDGs in all aspects of the business curriculum

can demand a very complex combination of teaching and learning priorities, networks, perspectives and initiatives.

According to García-Feijoo, Eizaguirre and Rica-Aspiunza [16], “there are no “magic solutions” on how to proceed in educational institutions when it comes to developing responsible citizens who are aware of the economic, social and environmental impact of their decisions” (p. 3). The authors recently carried out a systematic review of the deployment of SDGs in business schools and found that business schools have been addressing the issue at different levels. First, most of them recognize that it is important to raise students’ awareness of the underlying economic and social values that exist behind the curriculum and to foster students’ critical thinking and sustainability competences. Secondly, the authors have found that pushing forward the 2030 agenda in business schools demands an intense interdisciplinary and multidisciplinary cooperation between all agents and dimensions involved—“teaching, research, social projection, and management of the institution” (p. 15). Finally, the authors mention recent works that suggest specific learning methodologies that can be employed by business schools to address SDGs. Among such methods, they found student mobility, student associations and curricular and extracurricular activities.

Along the same lines, Giudici, Dettori and Caboni [17] state that, besides the pressure of integrating societal, ethical and sustainability values into the curriculum, management education faces the challenge of adapting studies to students who are born in a digital era and who are going to be called to navigate the globalised interconnected business. Therefore, they highlight the importance of moving away from traditional teaching practices towards the adoption of modern methods, which include the adoption of business cases, films, videos, virtual environments, social media and, among others, online collaboration. Moreover, digitally enhanced learning and teaching require important infrastructure, skills from staff and policy and funding frameworks [18]. The fact is that digitalization has been on universities’ agendas for more than a decade and “technology has influenced much of what colleges offer, how they offer it and what students expect” [19]. Especially after the pandemic—which impeded the physical mobility of students for an important period of time—Intercultural virtual collaboration (IVC) has emerged as one of these opportunities for addressing (un) sustainable challenges in various cross-cultural contexts in higher education [4,16]. It can be defined as

a practice, supported by research, that consists of sustained, technology-enabled, people-to-people education programmes or activities in which constructive communication and interaction takes place between individuals or groups who are geographically separated and/or from different cultural backgrounds, with the support of educators or facilitators” [20]

Having developed over the years together with the advancement of the internet and communication tools, IVC connects students from different geographical locations through technology, allowing them to collaborate as a team in tasks or projects without travelling physically. The practice has been integrated into the Higher Education curriculum in different formats [21], and the literature offers a multitude of examples of IVC projects, which involve complex international, intercultural and cross-institutional collaborations [4,14,19,22]. As Kurek [23] defends, the greater the complexity, the richer the learning experience.

Since its emergence, IVC has been called different names in the literature, including virtual exchange [24], telecollaboration [25] and COIL [26], among the most popular of them. In business education, IVC is mostly found under the label of Global Virtual Teams or GVTs [27] and adopts an experiential approach, asking students to work together on business cases and joint projects with the objective of developing students’ intercultural and digital competences, as well as preparing them to perform in intercultural virtual groups such as the ones that they are going to find in current digital and globalized workplaces [28]. Bird, Oddou and Harris Bond [29] also identify Global Virtual Teams as one of the learning experiences with great transformative potential. According to the authors, experiences with the highest potency for transformation have four main elements: Complexity (multi-faceted and multi-layered experiences), affect (emotions are stimulated by the experience), intensity

(when the experience demands efforts and focus from learners) and relevance (how much the experience is perceived to be of value to the learner).

Yet, pedagogical approaches integrating ESD and Sustainable Development Goals (SDGs) in business higher education through IVC are still scarce [3,9,30]. Different teaching and learning strategies to develop SDGs in business higher education can be found in the literature, for example, project-based learning [10,31], simulations [15,32] or digital methods [33,34] to cite some. However, very few studies have focused on pedagogical methods to specifically teach SDG12, which is related to sustainable consumption. For instance, only one study approaching SDG12 could be identified in a recent systematic review that analysed manuscripts available on sustainability during the COVID-19 pandemic [35]. In particular, there is a lack of publications in business that address a comprehensive integration of SDG 12 (responsible consumption) and encourage students to develop their sustainable values, intercultural competencies and critical thinking through IVC with international partner universities. As O'Dowd [36] defends, there is a need for a transnational model of virtual exchange that goes beyond intercultural competence and moves towards intercultural citizenship. According to the author, such a model should not only engage students in intercultural interactions or critical reflection on these encounters but also encourage "learners to engage with themes which are of social and political relevance in both partners' societies" (p. 11) with the ultimate aim of spurring them to take action and initiate change in their societies.

This paper describes an IVC project involving undergraduate students from two business schools in two different countries (the Netherlands and Spain) who work together to develop a business case to analyse how international companies approach SDG 12 (sustainable consumption) through their marketing communication in the different countries represented in the groups. This educational initiative aimed at fostering second-year international business students' awareness of sustainability and reinforced both the Dutch and the Spanish business schools' visions to further equip their students through learning approaches that support the transition of their societies towards sustainability and global citizenship.

The aim of this study is twofold. First, it describes how the IVC project can contribute to raising students' awareness of how international companies approach SDG 12 (sustainable consumption) through their marketing communication in different countries. Second, it attempts to determine how an international and interinstitutional virtual collaboration project can contribute to developing students' intercultural competence while approaching SDGs and marketing communication as content.

The following research questions are asked:

RQ1—How can IVC contribute to raising business students' awareness of how international companies approach SDG 12 (sustainable consumption) through their marketing communication in different countries?

RQ2—How can an international and interinstitutional virtual collaboration project contribute to developing students' intercultural competence while approaching SDGs and marketing communication as content?

Taking this into account, we designed a project that shows how business schools can approach SDG12 by implementing an international, intercultural and cross-institutional partnership approach through ICV. We expect to offer good practice on how to increase students' awareness of intercultural and sustainability issues in business and that the conclusions of this study can be used as guidelines for the further development of ICV.

In the next section, we describe the details of the project that generated the data used to answer the given research questions. We also detail the methods used for data collection and analysis. Further, we present the results derived from the analysis of the content of group reports delivered by students. Finally, we discuss the results with previous related literature and conclude the work with recommendations for moving further forward in higher education curricula to incorporate ESD in international collaboration projects.

2. Materials and Methods

The IVC project, which is the object of this study, involved a total of 63 second-year business students. Forty-six students were enrolled in the Spanish Business School and 17 students were enrolled in the Dutch Business School. In Spain, the participating students were enrolled in a Cross-cultural Communication course. In the Netherlands, international students were enrolled in an elective based on its intercultural awareness and global citizenship education programme.

The project took place from October to December 2019. Three tasks were implemented in sequence. The sequence (Table 1) was built with reference to the typology of tasks proposed by O’Dowd and Ware [37] and based on the instructions proposed by Ferreira-Lopes, Bezanilla and Elexpuru [38], and included (1) an information exchange task (Appendix A), (2) a workplan based on the comparison of Hofstede’s [39] National Culture Dimensions (Appendix B) and (3) a business case analysis as a final collaborative task (Appendix C). Both partner universities agreed to adopt the business case related to marketing communication and SDGs into the IVC project and blended classes.

Table 1. Task sequence implemented in the Intercultural Virtual Collaboration project.

Task	Type of Task	Description of Task
Task 1	Information-exchange task (icebreaker)	Each group was invited to record a video locally introducing team members to the colleagues from the other location
Task 2	Workplan based on the comparison of Hofstede’s National Culture Dimensions	Groups had to meet online, discuss their cultures’ differences and similarities according to Hofstede’s National Culture Dimensions and then prepare a workplan for the development of the business case (Task 3)
Task 3	Business case analysis of how international companies of choice address SDG 12 in the countries represented by the group members	Groups had to analyse how two or more international companies from the same industry adapted their marketing strategies to address SDG 12 and to which extent they adapted such strategies to local cultures. Students had to connect the information found about the companies and SDGs with the content learned in face-to-face sessions.

Participants worked in groups composed of students from both universities in order to complete the tasks. To guarantee cultural diversity in the online group work, the teachers purposely formed 10 teams of up to six members based on a balance between gender, age, cultural background and university. While the instructions for the tasks were posted by teachers on Google Classroom, students from both universities were free to collaborate online using communication and video conferencing tools of their own choice, such as Zoom, Skype, Teams and Whatsapp.

Two instruments were used in this study. First, the reports delivered by the groups served as a source of qualitative data to respond to research question 1. Secondly, in order to respond to research question 2, students were asked to complete an after-task questionnaire. In this questionnaire, students indicated, on a scale that ranged from 1 to 5, how much they believed that the project supported them in achieving the 48 learning outcomes organized into 11 dimensions of the adapted version of the EMIC Intercultural Competence Model [38] (Appendix D). The EMIC model blends in its theoretical approach key ideas from previous well-known intercultural competence models found in the literature. It also adopts a mul-

tidimensional approach to intercultural competence as it defends that such competence is composed of a set of core elements and specific interrelated intercultural competence configurations. The four elements consist of four building blocks (intercultural knowledge, intercultural awareness, attitudes and skills), two supporting capacities (emotional intelligence and critical reflection) and one meta-capacity (developing intercultural competence). The interrelated competence configurations consist of four sub-competences. Three of these competences belong to the original version of the model (intercultural teamwork, intercultural conflict management and relationship building) while the last competence configuration (intercultural virtual teamwork) was added by Ferreira-Lopes, Bezanilla and Elexpuru [38] to better capture students' teamwork in virtual collaborative setups.

Students received the instructions for the three tasks on 12 November through Google Classroom. They also received the link to a Google form requesting their consent to use their productions for research purposes. The deadline for handing in the business case was 10 December 2020. During the four weeks of collaboration, teachers allowed in-class time for local peers to work together on the project and also to coach groups on the development of the business case and issues that emerged from the interaction with their remote team members. On the deadline given, students delivered the business case analysis through Google Classroom. After such delivery, they received through Google classroom the link to complete the after-task questionnaire with the self-evaluation questions. Due to Christmas break, students were given an extra 20 days to complete the questionnaire.

The qualitative data contained in the business case reports delivered by the groups were analysed in Atlas.ti software. The codes used can be found in Table 2 below. They relate to the learning outcomes that teachers expected students to be able to demonstrate to have achieved through the development of the business cases. Such codes were used to label the chunks of the reports that were related to such learning outcomes, which, in a later moment, allowed for a panoramic analysis of the achievement of the learning outcomes by each group. Quotes retrieved from the reports delivered by the groups were used to illustrate the results. For data protection issues, the groups and names of the companies that they analysed have been anonymised.

Table 2. Codes used in the content analysis.

Learning Outcome	Code
Explain how the companies selected approach sustainability	Sustainability
Explain how the companies selected adapt to the cultures represented in the group	Culture
Carry out a critical reflection about the intersection of culture x marketing x sustainability	Reflection

In turn, a descriptive analysis of the quantitative data derived from the questionnaires was carried out. First, the frequency (%) of answers under each category was analysed for each of the 48 learning outcomes. Then, means were obtained for each of the 11 Intercultural Competence dimensions of the chosen model.

3. Results

Table 3 below shows a summary of the analysis of the content of the ten reports delivered by students at the completion of the IVC project.

Table 3. Learning outcomes found in the business case reports delivered.

Group	Selected Companies' Industry	Explain How the Companies Selected Approach Sustainability	Explain How the Companies Selected Adapt to the Cultures Represented in the Group	Carry Out a Critical Reflection about the Intersection of Culture x Marketing x Sustainability
Group 1	Coffee	✓	✓	
Group 2	Fast-food	✓	✓	
Group 3	Consumer staples	✓	✓	
Group 4	Athletic apparel	✓	✓	
Group 5	Skin and body care	✓	✓	
Group 6	Fast-food	✓	✓	
Group 7	Automotive	✓	✓	
Group 8	Fast-food	✓	✓	
Group 9	Fast-food	✓	✓	
Group 10	Shaving razor	✓	✓	✓

3.1. RQ1—How Can IVC Contribute to Raising Business Students' Awareness of How International Companies Approach SDG 12 (Sustainable Consumption) through Their Marketing Communication in Different Countries?

As we can see in Table 3, the ten reports delivered by the groups presented the strategies adopted by the selected companies to approach sustainability. In all of them, groups provided descriptive information about the strategies adopted by the companies selected, as we can see in the quote below:

We can see that (company x) is working towards the SDGs and they have a lot of information about their strategy online. This clearly demonstrates that sustainability is a core part of their business and that they are aware of the damage they are doing to the world currently. In the Netherlands, (company x) boxes also promote that you help plant a tree with every delivered (company's product) printed on the box.

Asking students to compare two companies from the same sector also seemed to be a good way of getting them to reflect on how the characteristics of the selected companies influenced their decisions about how to approach sustainability:

Both companies also take responsibility in sustainability, and are an example of modern company governance. After all, it is a problem that affects the world, both have some goals in mind to reduce waste and emissions but (company y) has a bit more which is also logical because they are a large company they can afford to invest more into some possible solutions.

However, (company z) is not far away from (company y) in the pursuit to become more sustainable. Both of them establish their dedication towards being sustainable, and indicate it on their websites. The information that is provided there shows that the companies contribute to the Sustainable Development Goals. (company y) has certain goals included in their report, whilst (company z) not mention them specifically yet, which does not mean that they do not already contribute towards these goals. This probably has to be due to the size of the company.

Groups were also able to identify sustainable initiatives related to specific products and marketing strategies:

Regarding the second model we have chosen, which targets middle class customers, the (company b) is a 100% electric car. This is a clear example of how important is the role played by marketing communication tools in realizing the SDGs we have previously

mentioned. This vehicle fits perfectly with (company b)'s objectives mentioned before in their Sustainability Report 2019. We also can see that the company is being coherent with their goals and how the company is taking into account both their economic goals of making profit by selling as well as contributing to the SDGs.

Another example can be found below:

We chose to analyse these three specific products, because we think they represent the SDG'S of (company e) because they are all made of recycled plastic, collected from the sea. This type of action could help achieve the SDG 12, SDG 14 and SDG 15 because it promotes a responsible consumption of sustainable products, they help reduce plastic waste on the oceans and halt the loss of biodiversity.

In regard to how the selected companies adapt their business to the cultures represented in the groups, all reports analysed make reference to concepts related to culture that had been approached by both teachers in class during face-to-face sessions. Specifically, all the reports mention Hofstede's dimensions [39]) monochronic and polychronic cultures, as well as high- and low-context cultures [40]:

When talking about cultural facts, as we mentioned before there are some products that are typical in each country and that represent their culture. In the theoretical background we describe some of the dimensions of each country and we see there are many differences between Spain and Netherlands. Those differences may affect in the way they consume when talking about customers, and in the way they produce when talking about companies. For example, taking into account Dutch people are low context, companies need to make their advertisements explicit in order to attract customers. On the contrary, as in Spain people are high context, the relationship with the customers should be spontaneous and with interaction.

It was also clear in the ten reports that the groups were able to reflect on the way the different cultures involved in the groups influenced marketing strategies in light of the concepts previously learned. Group 5, for example, makes this approach clear:

In order to analyse how successfully (company i) and (company f) reach their customers in the Netherlands and Spain, our group concluded an analysis of both cultures. Our team took Hofstede dimensions, which may be related to the advertisement and marketing communication perception as a basis for the understanding of cultures.

Meanwhile, Group 1 analyses how the Dutch and the Spanish cultures consume coffee and elaborate on how one of the companies in question (company y) adapts to the local customers:

In the Netherlands people more often get coffee to take with them while catching their train. So in the Netherlands it is more profitable for a company to make sure their coffee is easy to get and does not take a long waiting time to get it. This probably because the Netherlands is a more individualistic country meaning they are not searching as much as other countries to have a fun time with the friends or family at (company y), no they are on there way to work or home and want something to drink on there a way for example in the train. Of course they also have some sales to people that want to sit with friends with a nice cup of coffee but this would most likely be a lower number than in other countries. You can also see this back in their way they promote themselves on social media, they use short videos with updates, of new products that are available in the stores or came back. In the stores, they also mostly show people running towards (company y) while in other countries they show more people sitting to enjoy the (company y) showing the difference in target groups between the Netherlands and other countries.

Finally, results show that, although all groups accomplished the objectives of explaining how the analysed companies approached the issues of sustainability and culture in their businesses, they dealt with both topics as separate matters. Only one out of the ten reports contained a critical reflection about the interplay of culture, marketing and sustainability altogether to some extent:

Culture plays an important role in how international companies promote their products in order to realise their goals of both making profit as well as being sustainable because if a company did not respect sustainability, they would buy any brand. However, Spain, Germany and increasingly more countries are concerned about the well-being of the planet and thus its inhabitants care about the products they buy and how they are made. In the GLOBE webpage, we can see that both countries that we are analysing score high values in “future orientation”, which shows their concern about sustainability among other things. This means that making profits and being sustainable go hand in hand nowadays because they enhance each other. Furthermore, it is important for companies like (company g) and (company h) to demonstrate that they really care about the environment and they have social responsibility if they want to continue being successful. After doing the research and writing this report about (company g), we can better understand how important it is to have knowledge about cultural differences. Besides, we can also see that sustainability is an important factor that companies need to take into account nowadays and all of us are glad that we got to know how some of them do it since sustainability is such an important topic for all of us. Furthermore, we got to see and compare by ourselves the cultural differences that exist between the members of our group and how (company g) adapts its advertisements depending on the country they are focusing on.

3.2. RQ2—How Can an International and Interinstitutional Virtual Collaboration Project Contribute to Developing Students’ Intercultural Competence while Approaching SDGs and Marketing Communication As Content?

Figure 1 shows the results of the analysis of the data derived from students’ Intercultural Competence self-evaluation in the questionnaire applied after the completion of the task.

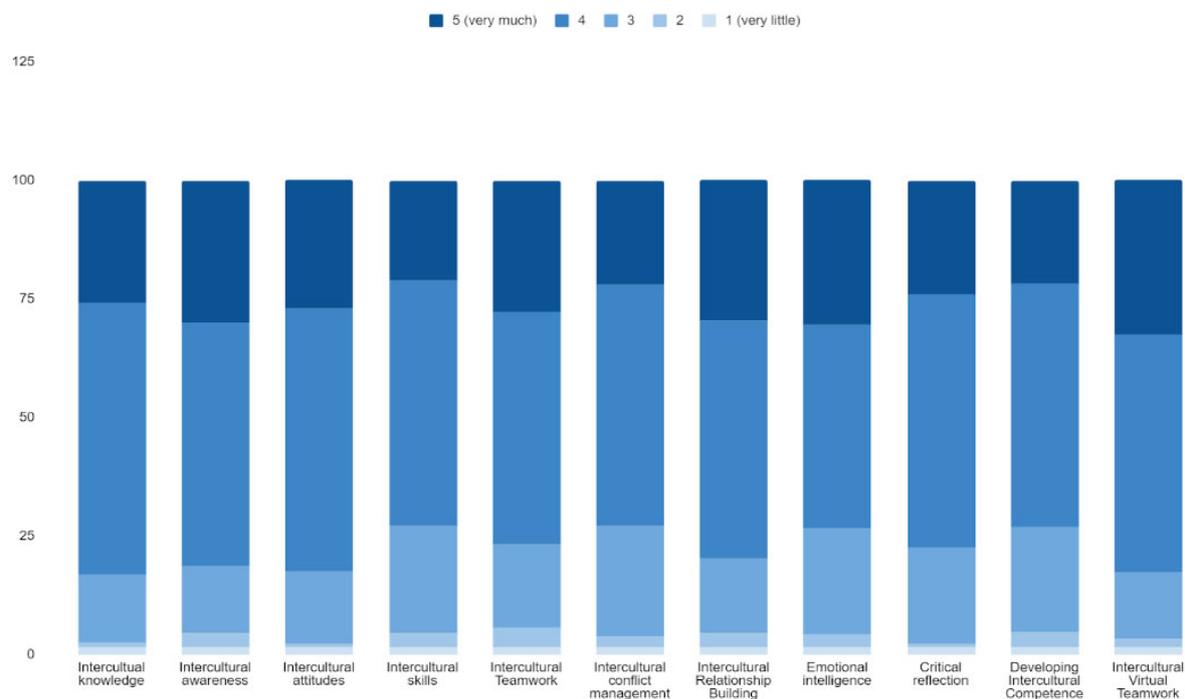


Figure 1. Extent to which students perceived that the project developed different dimensions of Intercultural Competence.

According to the perception of the majority of students (more than 70%), the project developed all 11 dimensions of the adapted version of the EMIC Intercultural Competence model (2015) to a high extent (4 or 5 on a scale of 1–5).

Of those, intercultural knowledge, intercultural virtual teamwork, intercultural attitudes and intercultural awareness were the dimensions with the best evaluations (more

than 80% of evaluations placed between 4 and 5). Intercultural skills, intercultural conflict management, emotional intelligence and developing intercultural competence were the dimensions less developed through the project according to students.

4. Discussion and Conclusions

In recent years, the business world has been increasingly recognizing the need to adopt a more sustainable approach to their activities. The UN 2030 Agenda has been an important instrument in this process, catalyzing institutions from different fields to promote equality and sustainable development through different channels. Responsible for preparing business leaders of tomorrow, business schools carry the ethical responsibility of including such messages through their curricula. Recent works have indicated that experiential and innovative pedagogical methods tend to promote a higher level of students' awareness of cross-cultural [29,41] and societal issues [16] and help them adapt to the digital era [17].

In this scenario, Intercultural Virtual Collaboration (IVC) emerges as a pedagogical strategy that provides students with the opportunity to collaborate with peers from other cultures through technology to analyse and engage with topics that are of social and political relevance [23] and IVC projects focused on SDGs can help students develop a critical sense of sustainable development challenges [9]. However, despite being a theme of growing interest to the research community, there is a need to share practices that integrate SDGs in IVCs [3,30].

This work attempted to determine how an Intercultural Virtual Collaboration project involving students from two business schools in two different countries contributed to raising students' awareness of how international companies have been approaching SDGs in different cultures. We also investigated how much students believed that participating in IVC projects developed their level of intercultural competence in different dimensions.

Following a task sequence built on the typology of tasks proposed by O'Dowd and Ware and on the instructions designed by Ferreira-Lopes, Bezanilla and Elexpuru [38], students from the Netherlands and Spain collaborated over a period of 4 weeks to develop a business case report that analysed how two or more international companies from the same sector approached SDG 12 (sustainable consumption) and adapted their business to the cultures represented in the working groups.

Results demonstrated that the project described in this paper was effective in getting students to research how the selected companies approach sustainability. By performing desk research, the groups were able to describe specific initiatives carried out by such companies in order to approach SDG 12. We could also observe that giving students the task to analyse two companies from the same sector provided them with the opportunity to reflect on the differences and similarities of companies' approaches depending on the characteristics of their business, allowing them a richer set of information to build on.

The project also proved to be a good means to invite students to critically analyse how companies adapt their marketing strategies and products to different cultures. Here, the fact that students needed to analyse the cultures represented in the group allowed them to experience a firsthand exchange of information with their colleagues from other cultures about cultural perspectives different from their own [42]. In some reports, observations were related to their direct observable experience (such as in the example of the group that analysed international companies in the coffee industry and reflected on whether their own cultures performed the habit of drinking coffee in a more individual or collective way). This is in line with recent findings from Lenkaitis [9] who also observed that integrating SDG content into virtual exchange supported students in creating a "sensitive lens to look at global issues" (p. 13). This led not only to learning content-specific knowledge about business, SDGs or cultures but also to the development of students' intercultural competence during the collaboration.

An analysis of the questionnaire applied at the end of the task also showed that the great majority of students perceived that the project developed their intercultural

competence level in different dimensions, especially in intercultural knowledge, awareness, virtual teamwork and attitudes. This is in line with a multitude of previous studies that showed the potential of adopting a task sequence as a pedagogical strategy in IVC projects to develop students' intercultural competence [43–46]. These results are very much aligned with teachers' expectations toward the project and its practical approach. Having students perceive the development of knowledge also aligns with the results obtained from the analysis of their reports, which, as explained before, showed that they were able to manage concepts related to sustainability, management and cultures.

This paper contributes to the community with a good practice that shows how business schools can use IVC to raise students' awareness of how businesses around the world can approach SDGs (especially SDG 12). The project itself also contributes to SDG 4 (Quality Education) and even more specifically to Target 4.7, which calls for ensuring that all learners acquire the knowledge and skills needed to promote sustainable development. In addition, by implementing an international, intercultural and cross-institutional educational partnership to approach SDGs, IVC enriches students' experience with a cross-cultural perspective, leading to intercultural competence development. As Storey, Killian and O'Regan [47] showed, implementing Responsible Management Education does not exactly need to imply structural changes in curriculum or activating a faculty's own networks. Instead, creative learning activities and exercises can work as good means to introduce sustainability issues to students.

Still, it should not be overlooked that establishing an IVC partnership demands substantial efforts from both partner universities [48]. First, it takes time to align support systems, knowledge and skills from the educators engaged in the IVC [13]. Second, it also challenges the students to learn to connect and create a sense of a team with culturally diverse and unfamiliar peers who collaborate virtually to fulfil their shared goals. In addition, students need to be equipped with a level of digital literacy since IVC requires them to navigate through different platforms for content and connection.

We also see opportunities for further improvement of this assignment. First, we could observe that, although students were able to approach the issues of sustainability and culture in business, only one group carried out a critical reflection on the intersection of culture x marketing x sustainability. Most groups were not able to achieve this high level of abstraction. This can be linked to a number of reasons ranging from companies themselves not making this link in reality to most second-year students' lack of intellectual maturity to analyse the problem by adopting a global vision/overall perspective. Future implementations could leave more space for teachers' mentoring to support students in articulating these variables. Besides, not all students perceived all dimensions of intercultural competence were equally developed through the project. Perhaps when designing the pedagogical strategy for the IVC project, teachers could also put more emphasis on the development of emotional intelligence or intercultural conflict management skills, to cite some that were not so highly acquired through the project according to students' views. More of this could be investigated by analysing similar projects implemented both with other groups of second-year students and with more advanced groups. In addition, although in this study we adopted a more exploratory qualitative approach supported by quantitative data obtained from questionnaires, we consider that future studies could benefit from further exploring the design and results from questionnaires and adopting control groups to support the methodology. The impact of different variables such as group formation and internal dynamics, gender and intercultural background, as well as an analysis across different sample groups, could strengthen the research purposes. In this sense, we leave an invitation for similar studies approaching SDGs in business through IVC to be developed.

Finally, as O'Dowd [36] highlights, global or intercultural citizenship goes beyond intercultural interaction and critical reflection, inviting students to get organized in transnational communities to change their societies in practice. We envisage developments of this current study could go in this direction by proposing tasks that require students to

move beyond analysis to propose and implement concrete solutions to a more sustainable (business) world.

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

Appendix A

Hello all!

For the icebreaker, we invite you to record a 5-7 minute video to introduce your local group to the group you are interacting with virtually. In the video, you should mention:

INDIVIDUAL INFORMATION

- Your full names
- Nationalities
- Hobbies
- Any likes or dislikes
- Family size

GROUP INFORMATION

- Any interesting facts/aspects about your culture and a comment on how you relate/don't relate to those
- Your expectations for the course/collaboration in the group

Each local group should record only one video. After doing so, you should share it in a message here on the main board, so that your colleagues can watch it.

IMPORTANT:

1. See the attached file for instructions on recording, uploading and sharing your self-introduction video. You have two options: first, you can upload your video to youtube and then share the link in your message here. The second option is to attach the file directly to your message here.
2. The video must be recorded and uploaded in class.
3. We encourage you to comment on each other's videos as they are posted. Interaction in virtual groups enhances learning.

Figure A1. Instructions published in Google Classroom for Task 1—Information Exchange Task (icebreaker).

Appendix B

Hello group:

In this activity, we ask you to:

1. Meet your group colleagues online to discuss the differences and similarities between the cultures represented by the group members (Hofstede's dimensions, communication styles, time perception....) and about the possible influence that such aspects might have on the functioning of your group

2. Make a group report (up to 3 pages) with:

- a brief summary of the group discussion including individual observations made by group members in relation to point 1
- a group reflection of the pros and cons of the diversity represented in the group
- strategies that can be adopted in order to overcome problems that might derive from such diversity
- a workplan for the development of the business case (final assignment - instruction already posted on the platform) mentioning (1) frequency of meetings, (2) technology to be used by the group, (3) roles and responsibilities of participants (leader, communicator, secretary...), (4) milestones to be achieved, (5) expectations related to the quality of the work, (6) expectations related to the relationships between group members, (7) communication styles and (8) strategies to deal with conflicts.

IMPORTANT:

1. Bear in mind that we expect the collective reflection held during your online meeting to be reflected in the report and not a 'copy and paste' of individual perspectives.

2. At least one student from the group must upload the group report to the assignment in Google Classroom within the given deadline.

Figure A2. Instructions published in Google Classroom for Task 2—Workplan.

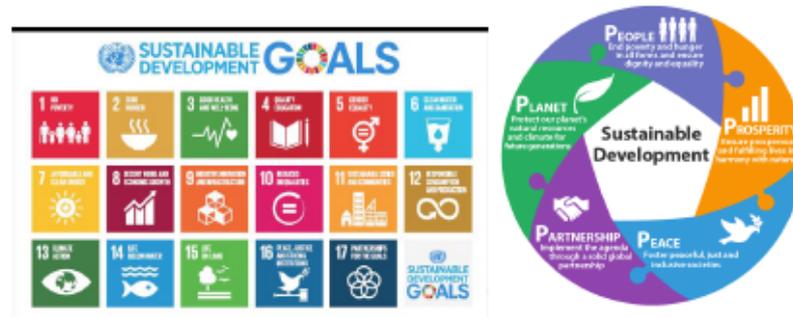
Appendix C

Concept Business Case Assignment

Context:

The role of marketing communication tools in realizing the Sustainable Development GOALS.

Sustainable consumptions vs Profit making vs Culture



Companies like Unilever and Proctor and Gamble (P&G) make and sell laundry detergents, among other products. Their goal is to make profit and satisfy their shareholders. At the same time, they want to contribute to the sustainability development goals of the United Nations. For example, P&G, has introduced its [P&G sustainability goals for 2030](#). While Unilever has come up with its [The Unilever Sustainable Living Plan](#). The products these two countries make are sold all over the world. They have to think of packaging, transportation, product design and variations as well as promotion. The question that normally pops up is:

In how far do companies go in realizing their goal of making profit while at the same time contributing to the goal of sustainable consumption?

In this assignment, attention is paid to how companies market or promote their products by taking into account both their goals of making profit as well as contributing to sustainable consumption. What role does culture play in all these?

In this business case, you will look at products made by two (or more) international companies. For each company, you will answer the following questions:

- Which marketing communication tools does the company use?
- In how far is the message adapted to the local culture?
- What is this culture?
- Which cultural elements have a higher impact in the marketing communication tools used?

In analyzing the above elements, you should have the concepts studied during the course/module as reference (national dimensions, low-context/high-context, monochronic/polychronic, etc).

The central question to the analysis is:

In how far does culture play an important role in how international companies like, Unilever and Proctor and Gamble, promote their products in Spain and The Netherlands in order to realise their goals of both making a profit as well as contribute to the sustainable consumption goals of the United nations?

Figure A3. Instructions published in Google Classroom for Task 3—Business case.

Appendix D

Table A1. Dimensions and indicators of EMIC Intercultural Competence Model (adapted version). Ferreira-Lopes, Bezanilla and Elexpuru (2018). Reproduced with permission.

Intercultural Competence Dimension	Indicator	Learning Outcome
Knowledge	K1	Develop an increased understanding of the concept of culture, how cultures differ and the notion of ‘otherness’
	K2	Gain knowledge of the main concepts related to Intercultural Competence
	K3	Identify vocabulary and concepts that are required in intercultural situations
	K4	Develop an understanding of the relationship between culture-specific knowledge and stereotypes
Awareness	AW1	Develop intercultural awareness—awareness of differences between cultures
	AW2	Increase cultural self-awareness—awareness of oneself as a cultural being and of the fact that our own behaviour, views and reactions are conditioned by our own cultures
	AW3	Increase awareness of specific cases when cultural conditioning is at play—not only knowing that culture is supposed to influence human behaviours but being capable of identifying this influence in practice
Attitudes	AT1	Become aware of attitudes needed for higher levels of Intercultural Competence (such as acceptance of differences, openness, non-judgmental attitude, tolerance, a cooperative mindset, flexibility, valuing diversity and respect for culturally different others)
	AT2	Practise applying non-judgmental attitudes—not judging culturally different behaviour and non-judgmental attitudes in general
	AT3	Develop openness to adjust behaviour in intercultural interactions
Skills	S1	Develop practical intercultural communication approaches
	S2	Develop an ability to mediate in an intercultural situation
	S3	Practice verbalising cultural expectations and norms, discussing expectations and speaking about culturally different practices that are disturbing; ability to speak about cultural differences
	S4	Identify the impact of cultural differences in misunderstandings
	S5	Develop an ability to check how one’s behaviour is perceived in an intercultural context
	S6	Develop an ability to adjust one’s behaviour in a culturally diverse context
	S7	Improve the ability to shift between cultural environments
	S8	Develop strategies for dealing with people with (perceived) lower IC
Intercultural Teamwork	ITM1	Develop skills for working with diverse teams
	ITM2	Increase understanding of leadership roles and strategies for intercultural teams
	ITM3	Develop skills of mediation in intercultural teams

Table A1. Cont.

Intercultural Competence Dimension	Indicator	Learning Outcome
Intercultural Conflict Management	ICM1	Understand the impact of Intercultural Competence on conflicts
	ICM2	Be aware of strategies for identifying, analysing and solving intercultural conflicts
	ICM3	Develop skills for effectively dealing with conflicts related to cultural differences
Intercultural Relationship Building	ITM1	Increase awareness of issues and challenges in intercultural relationship building
	ITM2	Develop a positive attitude to intercultural relationships
	ITM3	Develop ability to form, develop and maintain intercultural relationships (private or work)
	ITM4	Develop strategies for encouraging intercultural relationships in one's environment (private or work)
Emotional Intelligence	E1	Gain knowledge about the concept of emotional intelligence and its use
	E2	Develop awareness of one's own emotions
	E3	Increase one's ability to manage own emotions
	E4	Improve one's ability to notice and understand emotional perspectives of culturally different others through empathy
	E5	Develop an ability to deal with emotions in teamwork and conflict situation
Critical Reflection	CR1	Develop the capacity to deal with stereotypes (they have themselves or others might have about their culture)
	CR2	Develop cognitive flexibility and/or ability to analyse intercultural encounters through a culturally aware perspective and seeing things from different cultural perspectives
	CR3	Develop a critical approach to culture-specific knowledge
	CR4	Increase critical awareness of one's own assumptions and behaviour in an intercultural context
	CR5	Increase critical awareness of others' behaviours in an intercultural context
Developing Intercultural Competence	DIC1	Demonstrate understanding of learning strategies for developing Intercultural Competence
	DIC2	Increase understanding of one's own learning and development approach to IC development
	DIC3	Know how to identify logistic, specific and in-depth knowledge of individual cultures
	DIC4	Develop an attitude of lifelong-learning in relation to Intercultural Competence development
	DIC5	Develop awareness of one's own level of Intercultural Competence in order to identify developmental needs
	DIC6	Develop an ability to set objectives, plan actions and reflect on own's progress in Intercultural Competence development
Intercultural Virtual Teamwork	IVT1	Understand the main characteristics of virtual communication and the role it plays in a globalized workplace nowadays
	IVT2	Be aware of the impact that virtual communication has on intercultural virtual teamwork
	IVT3	Have a positive attitude in relation to creating strategies to overcome barriers posed by virtual communication
	IVT4	Put strategies to overcome barriers posed by virtual communication into practice when working in intercultural virtual teams

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