

# Chapter 6

## The Use of New Technologies Applied to the Project-Based Learning Method in an International Context: VII Virtual Intensive Programme on the Future of Banking and Finance



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**Abstract** The use of new technologies applied to teaching has led to a qualitative leap in education due to the pandemic caused by COVID-19. This chapter describes the experience of converting an intensive program that had been celebrated in person since 2014, into an online event. Thus, through a project-based learning process, students of different nationalities were able to expand their knowledge related to ethics and finance, as well as other skillsets, such as autonomous and collaborative work, working in a multicultural environment, or the development of technological and language skills. All this was possible thanks to recent developments in software and applications that allow students and teachers to collaborate simultaneously while being separated by hundreds of kilometers in different European cities.

**Keywords** Autonomous work · Cooperative work · Online meeting · Internationalization · Project-based learning · New technologies

### 6.1 Introduction

The outbreak of the pandemic and the subsequent global shutdown in March 2020 affected all areas of our lives. Just a week before the planned on-site meeting of the Intensive Programme (IP) in March 2020 on the Future of Banking and Finance (FBaF), the event had to be canceled. And this, although it had previously been successfully celebrated for six editions, allowed University students and professors of up to six different nationalities to participate.

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Almost a year later, when the effects of the pandemic were beginning to subside, but restrictions remained, a decision was taken to build on what had been learned during the confinement and to transform the IP into a virtual event. This chapter aims to explain how emerging learning technologies were applied to further develop a project-based learning program in a multicultural environment.

This chapter will first explain how the idea of launching the IP came about, and then outline the objectives of the program. Thirdly, it will explain how the IP has been organized in a virtual way after six face-to-face editions, followed by the role played by new technologies in converting it into a virtual event. Finally, the results obtained from the surveys carried out by the participants will be presented.

## 6.2 The IP: Origin and Evolution

From the mid-1980s until the beginning of the twenty-first century, the world economy was characterized by the stability of the main macroeconomic variables. This is the reason why this period, in which growing investment spurred by the low level of risk and uncertainty, is referred to as the Great Moderation. This term, coined by Stock and Watson (2003), was popularized by Ben S. Bernanke, Governor of the US Federal Reserve, at a conference in 2004 (Bernanke, 2004).

Despite the economic boom, signs were accumulating warning of a possible financial crisis, though initially everything indicated that it would take place in the so-called emerging economies (Martín Aceña & Pons Brías, 2011). The lack of regulation of financial institutions in the US, together with the drop-in interest rates in the early 2000s, had favored the creation of a real estate bubble. In parallel, financial institutions had been securitizing mortgage loans and consumer credit into marketable securities. As Martín Aceña and Pons point out, the system rested on the existence of cheap credit and increasing house prices (Martín Aceña & Pons Brías, 2011). This clearly unstable equilibrium broke down when house prices began to plummet, leading to an increase in default payments. Thus began the subprime crisis which eventually led to the so-called Great Recession. Originating in the US, it shook all economies with an unparalleled intensity since the Great Depression of 1929.

Following these events, Petra Hogendoorn-Schweighofer from Inholland University of Applied Sciences (The Netherlands) felt the urge to transmit to students that a great deal more had gone wrong than the traditional business aspects usually studied by economists and economic historians. Specifically in ethics, the excessive risks taken by market players and questionable behavior that crossed ethical lines played a decisive role in the outbreak of the Great Recession. In this context, the development of an Intensive Programme on Ethics and Banking was proposed, in which different European Universities would participate and discuss these issues. The first meeting took place in Rotterdam (The Netherlands) in 2014, with Madrid (Spain), Ghent (Belgium), Katowice (Poland), Prague (Czech Republic) and Zaragoza (Spain) in

2019 as the venues for the following years. In March 2020, the IP was to be held in The Hague (The Netherlands), but the outbreak of the pandemic and the subsequent global shutdown meant that the event had to be canceled.

European universities, aware of the important added value that this program represented for students, began to work on an alternative to the physical meeting. After six editions, it had been found that participants developed a series of transversal competencies, which coincided with those that employers nowadays most request (Martínez Clares & González Morga, 2019). The development of tools for distance learning, which took place during the lockdown, and the experience gained during those months, would help to develop a new virtual intensive program. The idea was to create an experience for students in which they associate the idea of learning with those of participation, information search and autonomous and cooperative work for subsequent discussion (Fernández Batanero, 2004). All of this is combined with the use of new technologies.

Under these premises, a working group was formed by professors from the Inholland University of Applied Sciences (The Netherlands), University College Ghent (Belgium), University of Economics in Katowice (Poland), University of Heilbronn (Germany), University of Administration and Finance Prague (Czech Republic), University of Zaragoza (Spain) and University CEU San Pablo, Madrid (Spain). The objective: to celebrate an IP in a pandemic world where travel was not possible.

It should be noted that the IP has always been a flexible program, adapting to the economic situation at any given time. Once the Great Recession was over, it was given a new orientation, linking the future of banking and finance with sustainable development. Brundtland's definition states that sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment & Development, 1987). Sustainable development calls for growth without significant deterioration of the environment and depletion of natural resources on which human well-being depends. It also calls for quality of life, fairness and equity, participation and partnership. Therefore, the three pillars of sustainability are the social, the environmental and the economic pillars. In this sense, "Sustainability transition in finance is seen as the result of existing regimes which open up as a consequence of external shocks (climate change, energy transition, low carbon economy) and simultaneously bottom-up innovations and new financial initiatives" (Ryszawska, 2016).

### **6.3 Collaborative Work in a Multicultural Environment: The Project-Based Learning Method**

As explained, the IP involves the collaboration of students from across Europe. At the end of the program, these students must write a policy document on decision-making within financial institutions. The focus lies on how to work toward sustainable financial institutions incorporating the rapid technological changes on the chosen

topic. Also, students should articulate factors for success when working with people from differing cultures and train intercultural sensitivity by reflecting on intercultural collaboration.

To facilitate the work and to ensure broad coverage of such a generic topic such as the future of banking and finance, students and professors were divided into six topic groups that cooperated throughout the program. These topic groups, six in total, were the following:

Topic 1—“Corporate Rating versus Sovereign Rating”: this topic focuses on the areas of business rating and sovereign rating, independence of credit rating agencies and regulation of credit rating agencies in the European Union and in the world.

Topic 2—“Taxation, financial regulation, sustainable fiscal and monetary policy”: although taxes were not the root cause of the 2008 financial crisis, some aspects of tax policy might have contributed to increased risk-taking of banks and indebtedness of households and businesses, leading them to adopt wrong economic decisions. This situation could have contributed to excessive demand in the housing market and boosting prices. This development, combined with tax avoidance and irresponsible lending practices, could have paved the way for a speculative bubble and following instability.

Topic 3—“Corporate Governance”: The Lehman Brothers collapse and an improper securitization of the US subprime mortgages triggered a major financial crisis in 2008. This financial crisis resulted in general screening of financial institutions’ capacities to introduce mechanisms to prevent the situations that had resulted in the crisis were to take place again. In this topic group, students have the task to investigate two Banks from their respective countries and review information provided on Corporate Governance issues. The aim is to identify which banks seem to do better in terms of transparency regarding directors’ compensation schemes, gender equality policies, composition of the board of directors, etc.

Topic 4—“Evolution of Banking 2030 and beyond: the influence of Fintech”: this topic centers on the development of FinTech that refers to the use of new technologies in the financial services industry to improve operational and customer engagement capabilities by leveraging analytics, data management and digital functions (Deloitte, 2016). Mostly, they are rather small and innovative digital companies that provide user-friendly banking services. In general, Fintech’s have two unique selling points: better use of data and frictionless customer experience. Above that, they have a totally different business model than banks and are not subject to the same regulatory scrutiny as the highly regulated banking sector.

Topic 5—“Alternative ways of financing for SMEs”: financing SMEs has long been the monopoly of banks. The financial crisis of 2007–8 has led to changes in capital adequacy standards. These have made it financially less attractive for traditional banks to finance these companies. Alternative ways of funding are being developed across Europe and elsewhere in the world. Researching which alternatives are being developed and the business models that are being used by the key players is the subject of this topic.

Topic 6—“Socially Responsible Investment (SRI)/Sustainable Developments in Banking and Finance”: in the current financial environment, alternative investments

have found new ways to deliver high returns and at the same time incorporate environmental, social and governance (ESG) aspects. The socially responsible investment market is growing rapidly. Questions revolving around the differences in the SRI marketplaces between countries, the role of financial institutions offering sustainable products, international requirements and legal frameworks for SRI investing and finally the topic of “greenwashing” practices are subjects of this topic group. Selecting two products of one or two banks from the respective countries allows for a comparative analysis in terms of ESG.

Students and professors from seven European Universities participated in the virtual meeting in 2020, which was organized by Inholland University of Applied Sciences (The Netherlands), University CEU San Pablo (Spain), University of Finance and Administration Prague (Czech Republic), University of Zaragoza (Spain), Ghent University College (Belgium), Heilbronn University of Applied Sciences (Germany) and Katowice University of Economics (Poland).

The ultimate objectives of the program are to encourage autonomous and collaborative work in a multicultural environment and to use new technologies. This allows students and teachers from different European cities to work together, without the need to be physically in the same place. The aim is to stimulate students to think critically about the future of Finance. Project-based learning is used for this purpose. Through a complex and meaningful project that is developed in several phases, the aim is for participants to acquire a variety of skills by promoting autonomous and collaborative work (García-Varcácel Muñoz-Repiso & Basilotta Gómez-Pablos, 2017).

## **6.4 How is the Program Organized?**

The conversion of the IP into a virtual meeting introduced important new features with respect to previous face-to-face editions. As will be explained in the following section, the development of new IT tools applied to the educational field allowed the introduction of these new features.

The IP has two distinct stages: one phase, called Pre-IP, which takes place in the weeks prior to the intensive program. The other takes place during the days of the meeting, in this case virtual. What does each stage consist of and what is the aim of each one of them?

### ***6.4.1 Pre IP-Phase***

This stage takes place between January 25th and March 14th, 2021. In this stage, the students are divided into international groups according to the topic groups as explained above. They must carry out a scientific project. By posing a hypothesis and using scientific language, the aim is to encourage students to work independently and

cooperatively. Throughout the weeks in which this phase takes place, the participants must answer a series of questions individually, paying special attention to the situation in their countries of origin. They are hereby guided by two to three topic teachers. At the same time, they must progress in the elaboration of a joint academic paper responding to the previously established hypothesis.

All the documentation needed for this phase is available in the IP Student Handbook. To facilitate this work, the teachers who lead the topic group set up the deadlines for the individual submission and establish the drafts of the final paper. New technological tools are used for this purpose, which allow the members of the topic to be in contact with each other, to upload documents and to work together. In the following section, the role of these tools, which are Microsoft MS Teams and WhatsApp, in the pre-IP phase will be developed in more depth.

This preparatory phase of the virtual IP is drastically different from the previous pre-IP phase that took place when the IP was an on-site event. In the pre-IP of the virtual meeting, the students now do what was previously done in the preparatory phase and during the physical meeting. The use of new, virtual tools as mentioned earlier has made this possible.

At the end of this phase, the members of each topic group must have produced a document and a presentation, following the Pecha Kucha format, in which they explain the objective of their work and the main conclusions obtained to their colleagues from the other topics. This presentation will play a very important role in the virtual meeting. The objective is to present the outcomes of each international group paper to the audience in a concise and effective manner. In finalizing the presentation, each topic team must engage in future collaboration with other topics, thus they will have to provide some ideas about the possibilities of cooperation with the topic indicated. The presentation should not include what each topic did but rather tell the audience about the findings and stimulate the subsequent discussion.

In addition, during the pre-IP phase the students participate in a workshop on intercultural skills, given by an expert from Inholland University of Applied Sciences. The aim is to let them discover the depth of international work, and for students to understand that there are cultural differences that must be considered when working in an international team. The aim is for students to realize and consider these differences as an enriching element rather than an obstacle.

### ***6.4.2 The Virtual IP-Event***

During the IP days, the focus is on in-depth study, comparative analysis, application and presentation of results between the different topics. The students must study the way the six topics are interrelated and influence each other. The topics are bundled into 3 groups to focus on during the three IP days. Based on the video presentation each topic group must make during the Pre IP phase and topic paper, each topic group is asked to study how topics are related and how they influence each other. In this section, guiding questions are formulated based on two linked topics.

- (a) Group 1 merges the previous topic groups 1 “Business rating and state (sovereign) rating” and topic group 2 “Taxation and fiscal regulation”. The addendum paper of this merger should reflect how the two topics are interrelated, more specifically regarding aspects like What are the relationships between business rating, corporate tax rates, accounting and tax base and tax havens? How are the ratings related to the pension systems? How can the fiscal regulation and taxation regimes affect the business ratings and the state (sovereign) ratings? What policies can we observe in this regard?
- (b) Group 2 merges the previous topic groups “Corporate Governance” and “Socially Responsible Investment (SRI)/Sustainable Developments in Banking and Finance”. During the IP Week, students from topic 3 (Corporate Governance) and topic 6 (SRI) work together to discuss several themes that are interrelated between these topics. Students will rely on the preparatory work they have done. The objective of the common group work is to review the previously investigated banks in terms of ESG performance. Students are asked to proceed with an in-depth analysis of the sustainability reports of the different national banks. Based on a self-developed matrix comprising ESG criteria such as environment, climate change, greenhouse gases, energy efficiency, air and water pollution, diversity, human rights, gender equality, health care and safety, bonus policies and executive compensations, anti-corruption, independence, structure, and composition of the board of directors, shareholders’ rights, and transparency among others.
- (c) Group 3 merges the previous topic groups “The influence of Fintech” and “Financing SMEs”. Questions that could be answered related to topics 4 and 5 are What role can technological developments and Fintech companies play in fostering access to financing for SMEs? Does Fintech lead to new business models in finance? Can new business models in general be enabled through Fintech?

In the in-depth study, special lectures and coaching are provided. Guest lecturers from different financial and governmental institutions deliver lectures. During these three days, students are requested to study the presentations of each topic group and to see how they influence the analysis of their own topic group. Students will write an addendum to their international topic paper, especially focused on the questions that have been explained. If students find further interesting details related to their own topic from the other related groups, they may also elaborate on these.

This phase of the IP was completely redesigned following the outbreak of the pandemic. In the face-to-face meetings before 2020, students did not have to work on this type of addendum. The aim of introducing such an addendum was to enhance the collaborative work around which the program is designed and to add a new perspective.

Once again, new IT tools have made this online meeting possible. MS Teams became the key element of this virtual meeting by providing all the necessary tools to work and meet across great distances. This also enables, as will be explained below, the possibility of carrying out a series of group activities without the need for participants to reunite in the same place.

## 6.5 New Technologies Applied to the Virtual IP

As previously explained, the main protagonists of the virtual IP are the new technologies, which have made it possible to develop this international educational event in times of a pandemic. Following the same scheme developed in the previous section, we will differentiate between the two phases into which the IP is divided.

### 6.5.1 Preparatory Phase: WhatsApp and MS Teams

Each of the six topic groups into which the IP is organized has students from seven different institutions in six different European countries. At the beginning of the preparatory phase, the members of each topic do not yet know each other. For this purpose, the teachers acting as guides, or so-called topic teachers, set up a WhatsApp group. Students, and topic teachers, must introduce themselves by writing a short text explaining what they study, where they are from and what their hobbies are. They must upload a photo and a short video describing what a day in their life is like and show a favorite place in their hometown. Although WhatsApp is not the main communication tool, it is very useful, because everyone has this application installed on their mobile phones. The speed of responding is faster than with email or the MS Teams messaging system. In fact, it is used by teachers to send important notifications to the team or by students when they have a question that needs to be answered relatively quickly (see Fig. 6.1).

However, the tool around which the IP truly revolves is Microsoft Teams, which allows for meetings, file sharing and joint work on documents. It should not be forgotten that during this preliminary stage the students must produce a scientific paper. For this purpose, the team at Inholland University of Applied Sciences created six group sections in MS Teams, one for each topic (Fig. 6.2).

The topic teachers established a schedule where the dates of the virtual meetings were published by topic, and with the deadlines for the individual questions (autonomous work) and the final paper (collaborative work). Specifically, and in a schematic way, these were the activities planned in the pre-IP phase:

- (a) **FIRST WEEK:** first meeting and zoom game via MS Teams. The aim is for students to introduce themselves, to determine the objectives of the topic and, using a zoom game, for the students to get to know each other a little better. The zoom game is a straightforward game in which students must choose a photo that fits them, either an object or an activity reflecting a hobby, for example. They must zoom in on that photo to obtain 6 different snapshots. They show their team members the photos, starting with the one which has the highest zoom. The team then asks questions that can only be answered with yes or no. If the other students cannot guess what it is, the next snapshot with a lower zoom is shown, and so on.



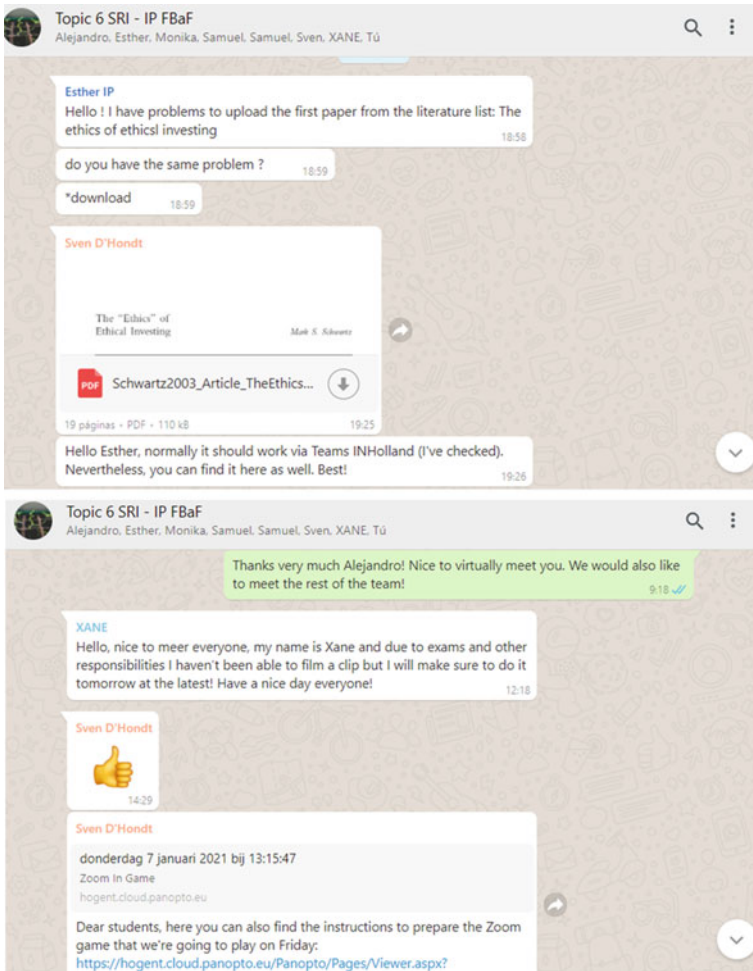


Fig. 6.1 Examples of topic 3 WhatsApp group chats

During this first week, the students must read the literature and prepare an introduction together. Teachers create a shared document in MS Teams called "Introduction". There, the students should explain the purpose of their international paper and some background to their topic, though not the literature review which would be the next step. Students should set out the reasons why the topic may be relevant, socially relevant and possible applications; mention the methodology they will apply or use to compare the participating countries; briefly describe the different sections and content of the paper. Students must take into account that it will be relevant to highlight which is the aim of the international comparison, and what is being compared. They shouldn't forget that the abstract and the introduction of the international paper

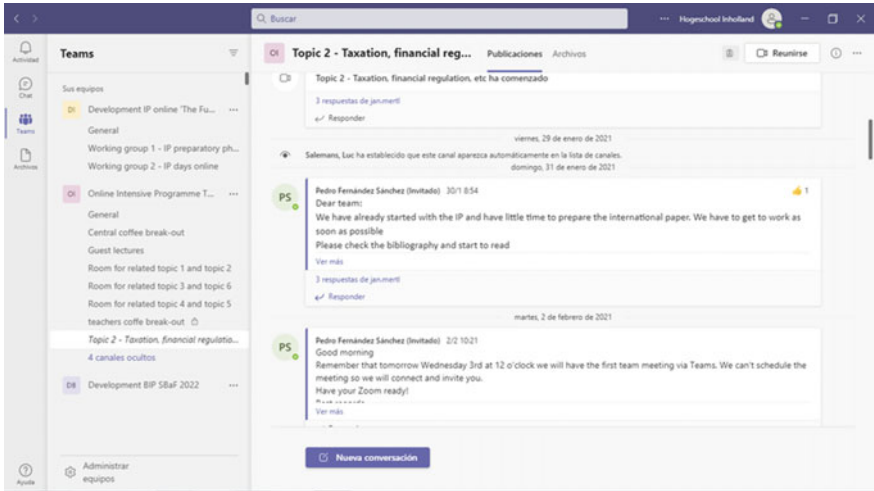


Fig. 6.2 MS Teams environment used for Pre-IP work

are crucial sections which attempt to impress and appeal to the review committee. Although this is a draft, which they can modify, it will help them to organize their work.

- (b) Second Week: Students should individually answer the first set of questions. A shared document is created in the MS Teams folder for this called “Questions 1 and 2”. This helps the student to reflect on the structure of the paper. Furthermore, another document is shared where students introduce the different sections of the paper. This is called “Paper Topic 2”.
- (c) Third Week: Students must answer the second set of questions, which is again individual work. Members of the topic should redact the different parts of the topic paper. Teachers provide feedback.
- (d) Fourth Week: Students must answer the last set of questions, finalize their topic paper and draw conclusions.
- (e) Fifth Week: Students must prepare their topic presentation, while the lecturers provide final feedback on the overall work.

Figure 6.3 shows how the students shared their documents and worked together during the preparatory phase. The shared Word documents allowed for simultaneous work, the use of change control to suggest modifications and the introduction of comments by the teachers to improve the final group document.

Finally, the students had to prepare a video presentation of their topic. Following the Pecha Kucha model (20 slides of 20 s each), they had to present the main conclusions of their research to the rest of their classmates. These videos had to be shared in MS Teams in the “General” room.

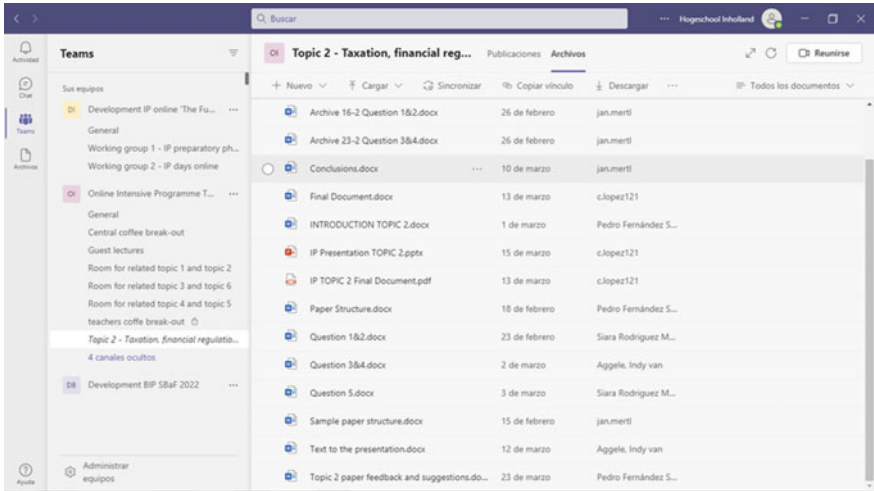


Fig. 6.3 Documents shared by students and teachers of topic group 2

### 6.5.2 The Virtual Meeting

The first virtual meeting of the IP was celebrated between March 15th and 17th, 2021, via the MS Teams platform. Several activities took place over the three days of the meeting. Several rooms were set up for this purpose. All joint activities were organized in the “General” room. In addition, three rooms were created, one for each of the merged topics groups, so that the students could work during the days of the meeting. There was also a “Conference” room and a “Coffee break” room for teachers only.

#### (a) “General” room

The opening and closing ceremonies took place in the “General” room. In addition, an intercultural competition between students was scheduled. A virtual escape room activity had been developed using an interactive tool called genial.ly (Fig. 6.4). It included a twofold objective. On the one hand, the virtual escape room was devised as an icebreaker. So far only the students of each topic, who had been collaborating in the previous phase, knew each other.

The escape room allowed students to get to know students from other groups. On the other hand, students could learn more about the cultures of the countries of each of the participating institutions. Conceived as a virtual journey through Europe, five competing teams had to compete to reach the destination, The Netherlands, first. By solving puzzles, quizzes, riddles and crosswords on cultural, economic and historical issues, they moved from country to country.

There were MS Teams breakout rooms set up, one for each of the competing groups. In each group, one student became the “spokesperson”. This person shared the screen of his/her computer with the rest of the teammates from the different



Fig. 6.4 Introduction and beginning screens of the escape room

countries and they solved the challenges together as a team. Each time a puzzle or question was solved, detailed explanations were provided. These explanations played an important role. To be able to complete the mission successfully at the end of the escape game a specific question was asked, the answer to which was contained earlier in one of the previous explanations. If students had not been paying attention, they could not finish the mission successfully. On the last screen, students were given a key to email to one of the teachers (Fig. 6.5). The first team to send it would receive gifts.

Teachers could go and visit the different breakout rooms where the students were playing to observe or to provide support if a team got “stuck” in any of the questions. The Escape Room, as we will explain later, was a great success and contributed greatly to the students getting to know each other even though they were hundreds of kilometers apart.

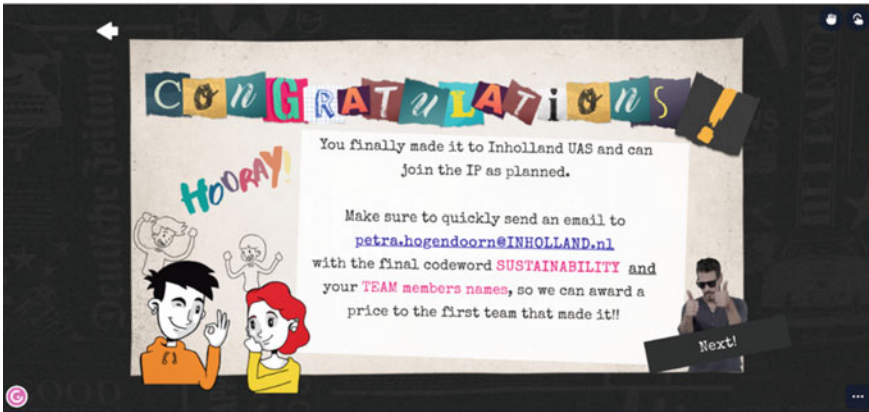


Fig. 6.5 Final escape room screen

### (b) Rooms for the joint groups

Three rooms were created for the joint groups to work on the addendum as explained in the previous section. MS Teams was used in the same way as in the previous phase. The teachers could guide and supervise the students' work. At the end of the three days, students had to have finalized an addendum, summarizing how the two topics were interrelated and the main conclusions they had reached.

Taking advantage of the versatility provided by MS Teams, the decision was taken that each of the three joint groups should design a presentation and a question and answer (Q&A) section following a three-step model:

Step 1: In a plenary session of 15 min, each joint group had to make a 10-min presentation followed by a 5-min Q&A. Combining the three groups, the total time of the first phase was 45 min. The number of topic students presenting was 3, and the remaining students and topic teachers were the audience.

Step 2: Three subgroups were created, and the estimated duration was 15 min. Each subgroup had a separate subtopic that was linked to the main topic of the respective addendum. Two students per subgroup took the lead. Students and lecturers subscribed to one subtopic of their choice. They entered the breakout rooms that were created for this purpose. Each subgroup prepared around 3 questions, quotes or graphs to get the discussion among all participants started. Interactive tools such as mentimeter, padlet and slido were used at this stage.

Step 3: With a total duration of 15 min, each subtopic had 5 min to present their concluding remarks in a final plenary session. In this phase, one student per topic group gave a quick summary of the discussion.

Thanks to the flexibility provided by MS Teams, it was possible to create breakout rooms, share screens and use interactive applications, all in a very dynamic way. With a single click, students and teachers could leave the room and go to the one they were most interested in.

**Table 6.1** Guest lectures during the IP

Date	Remarks and groups
Monday, March 15th	Integrated reporting related to group 2
Tuesday, March 16th	Experiences from the first Czech financial arbitrator relate to group 1
Tuesday, March 16th	Banks and FinTech—competition or cooperation in supporting SME development—the evidence from ING Innovation Lab, related to group 3

### (c) Guest Lecturers’ Lounge

In addition, students throughout the IP had access to lectures given by professionals or academics related to the different topics covered within the IP. When the meetings were face-to-face, a master class was scheduled, usually after a visit to a financial institution of reference. For example, when the IP was held in Prague in 2018, it included a visit to the Central Bank of the Czech Republic, where the origins and functions of the Czech Central Bank were explained.

The organizing committee of the virtual IP decided to multiply the number of master classes by three for the virtual IP event. There was one master class for each merged group. Table 6.1 specifies the date and topic of each of the three lectures that were given.

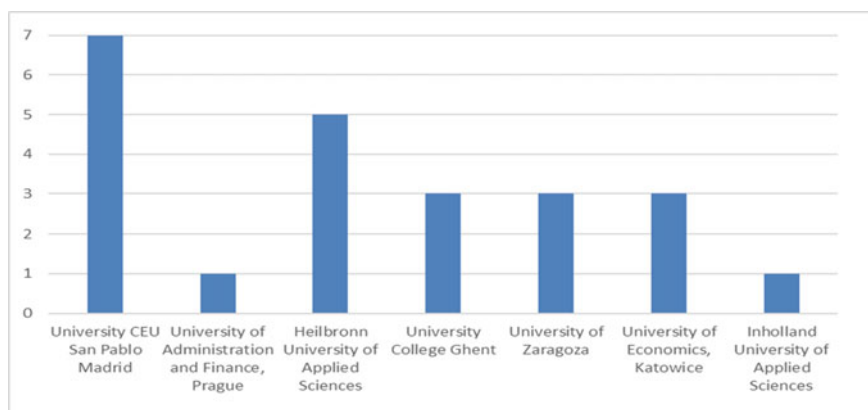
### (d) “Teacher’s coffee breakout” room

The “Teacher’s coffee breakout” room was conceived as a room for teachers only. Here, the academics could exchange views on the IP. This is where the lecturers would discuss different aspects such as how the merged topic groups were progressing, the outcome of the presentations and the final grading of the presented papers by each of the groups.

From what has been explained so far, without the MS Teams platform, neither the preparatory phase nor the virtual meeting itself would have been possible. The next question would be What do the participants think about the fact that the meeting took place virtually? What did they value the most and what did they value the least? The following section will try to answer these questions.

## 6.6 Results of the Online IP

The organizers of the IP were particularly interested in the success of this new meeting format, in the sense that the objectives pursued would be achieved. To this end, at the end of the program, a survey was distributed via Google Forms to the students asking them about different aspects of the meeting. Out of a total of 32 students from 7 European universities, 23 responded to a questionnaire on different aspects of the virtual IP, resulting in 72% of the students participating in this survey (Fig. 6.6).



**Fig. 6.6** Survey participants by institution of origin. *Source* Own elaboration

As can be seen in Fig. 6.6, students from Madrid were the most active in sharing their impressions of the first virtual IP with the organization, followed by German students. In any case, this is a more than significant sample.

As can be seen in Table 6.2, the participants were more than satisfied with the new organization of the IP. All the sections show a rating above 4, indicating a high degree of satisfaction, in line with what transpired when the IP was carried out face-to-face. Both, the duration of both phases and the dates were very suitable for students. All this resulted in a final IP satisfaction score of 4.30 out of 5. Of all the questions asked, this is precisely the one with the lowest standard deviation and the lowest variation coefficient, which shows that there is a large consensus among respondents on this aspect. It is also interesting to note that the participants consider that this program and its international character will increase their employability opportunities (4.09 out of 5).

On the other hand, and as can be seen in Table 6.3, the participants consider that they have improved important aspects of their education after participating in the IP. 96% of the students agree or strongly agree that they have gained academic knowledge related to the topic of the IP, i.e., about the future of banking and finance. The average score in this section is 4.35. Satisfaction with the skills of working in a virtual team (4.43) and understanding cooperation in a multicultural environment (4.35) are worth mentioning. The acquisition of virtual skills is the lowest rated, with a score of 3.83. It is the only issue where 4% of respondents strongly disagree, hence it is also the only one where the minimum value is 2. The reason could be that during the academic year 2020–2021, students and lecturers had substantially improved their technological skills in this field and hence the IP did not further advance this skillset for participants.

Finally, to identify the strengths and weaknesses of the IP, participants were asked about different aspects of the IP. Table 6.4 shows the results, ordered from the highest to the lowest satisfaction rate on average. The clear winner of the IP was the virtual

**Table 6.2** Scoring of different aspects of the virtual IP

	Mean	Mode	Standard deviation	Max	Min	Variation coefficient
How satisfied were you with the date of the IP days (March 15th–17th)?	4,39	5	0,72	5	3	0,164
How satisfied were you with the duration of the IP days (three days)?	4,35	5	0,78	5	2	0,178
Overall rate of the IP	4,30	4	0,56	5	3	0,130
How satisfied were you with the date of the preparatory phase of the IP (January 25th–March 14th)?	4,26	5	0,86	5	2	0,203
How satisfied were you with the duration of the preparatory phase of the IP (seven weeks)?	4,23	4	0,81	5	2	0,192
This IP and the international experience will help me improve my job opportunities	4,09	4	0,60	5	3	0,146

Note 5: very satisfied; 1: very unsatisfied

**Table 6.3** Students' perception of skills acquired during IP

	Mean	Mode	Standard deviation	Max	Min	Variation coefficient
Collaborating in a virtual international team	4,43	4	0,59	5	3	0,13
Academically, related to the content of the IP	4,35	4	0,65	5	3	0,15
Understanding multicultural cooperation	4,35	4	0,65	5	3	0,15
Command of English	4,22	4	0,67	5	3	0,16
Building a valuable international network	4,13	4	0,69	5	3	0,17
Online skills	3,83	4	0,72	5	2	0,19

Note 5: very satisfied; 1: very unsatisfied



**Table 6.4** Degree of satisfaction with different aspects of the IP

	Mean	Mode	Standard deviation	Max	Min	Variation coefficient
The escape room	4,74	5	0,45	5	4	0,095
The capabilities and expertise of the professors	4,52	5	0,73	5	2	0,162
The overall quality of teaching and coaching	4,52	5	0,67	5	3	0,147
WhatsApp group	4,26	4	0,86	5	2	0,203
MS Teams environment	4,22	5	0,80	5	3	0,189
The quality of the guest lectures	3,96	4	0,71	5	3	0,178

Note 5: very satisfied; 1: very unsatisfied

escape room activity. This would not have been possible without the web-based tool *genial.ly* and the MS Teams platform, which, as explained above, allowed competition between the different teams that were created for this purpose. In this respect, it scored 4.74 out of 5 with a very low variation coefficient (which indicates agreement on this aspect).

The expertise and experience of the teachers and the quality of teaching and coaching with an average rating of 4.52 were the next most valued aspects by the students. All students recognized the work of the teachers tutoring them in the pre-IP phase and during the days of the virtual IP meeting. Two aspects where the variation coefficient is very high are the WhatsApp group and the MS Teams environment, although in both cases the participants' rating is quite high. The reason could be rooted in two circumstances. On the one hand, there were six WhatsApp topic groups. The way they work varied greatly from one to another. Some WhatsApp groups were more dynamic and efficient than others. In the case of the MS Teams environment, unfortunately there was a worldwide collapse during the IP meeting, more specifically during some presentations, which could explain why some students gave a low score, given the poor experience they had. In any case, the overall high rating of the IP allows us to conclude that MS Teams has overall worked very well and has allowed us to celebrate this virtual meeting.

If we take the data in Table 6.3 as a reference, we can identify aspects where there is still room for improvement for future meetings. Mainly the guest lectures offered to students have the potential to be enhanced. In this regard, it is necessary to point out that it is rather challenging to succeed in all lectures being interesting for everybody. On a positive note, the virtual format introduces the flexibility to incorporate various master lectures from different parts of the world, over the course of several days. This was not possible when the event was celebrated on-site.

## 6.7 Summary and Looking to the Future

The pandemic has forced us to adapt to a quarantined world. It has affected all areas of our lives, from the personal to the professional. While human losses can never be compensated for, it is necessary to point out that because of the pandemic and in the field of education, many positive changes have taken place. Education has been one of the sectors that has adapted most quickly to the new situation, with the help of large IT companies. In a matter of hours, education professionals had to move from giving classes in person to teaching online.

In this chapter, we have described the experience of transforming an intensive program, which aimed to enhance students' autonomous and collaborative work in a multicultural environment through project-based learning, into a virtual one. Based on the experience accumulated during the toughest months of the pandemic and Microsoft's development of a tool, MS Teams, which allows for remote collaboration, teachers from seven European Institutions worked ceaselessly to adapt the existing program to face reality: a Europe with closed borders. The different paragraphs have pointed out how the new event was organized, and the role MS Teams played in it.

Based on student feedback and survey results, the meeting was a success, although participants still prefer face-to-face meetings. Looking ahead to a post-pandemic world, the IP organization will be maintained, with a pre-IP phase, in which MS Teams will continue to play a leading role, and a face-to-face on-site encounter. However, the MS Teams platform will continue to be used also during the face-to-face event, as it allows students to share documents and work together on the scientific paper easily and efficiently.

And finally, the plans for the future of this IP and the consortium of participating Institutions include a return to an on-site culmination event. The vision is to combine the online preparation with short-term physical mobility abroad, to one of the participating institutions during the IP-week. Prior to the physical mobility, a mandatory online component facilitating collaborative online learning and teamwork would remain the preparatory phase, very much as has been done during this past edition of the virtual IP. This hybrid program, or a so-called "Blended intensive program", would be receiving funds from the European Union in the framework of ERASMUS+. This type of funding is provided to blended IPs that cater to new, innovative and creative ways of teaching and learning via virtual cooperation.

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