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Different Applications of the COIL Methodology in Collaboration between Mexican and American Business Schools

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Abstract

This article presents the case study of collaboration in the teaching-learning process between the Business Schools of Mexican and American universities using the COIL methodology. Despite the great versatility of the COIL methodology, the literature on the subject is focused on so-called On Line COIL, which involves students from institutions located in different countries in a project developed asynchronously, using various means of electronic communication. There is almost no information of other forms of its implementation. Considering this absence, a different form of COIL called IN Person COIL that combined online collaboration with elements of face-to-face collaboration is described in the first case, meanwhile in the second case the traditional On Line COIL is presented. The results of the applied methodology and recommendations for instructors for those who would like to incorporate it into their didactic process are presented.

Keywords: COIL methodology, internationalisation of students, collaborative work, multicultural education

JEL Classification Code: M53

Introduction

Today's business environment is increasingly complex. The globalization process modified by the effects of the COVID-19 pandemic has increasingly challenged the preparation of new specialists in the area. According to the new trends in the training of future professionals, a new multi-diversity system will predominate, including in learning: multi modal (face-to-face, hybrid, synchronous remote); multi-experiential (combination of classroom learning with experiences in real environments), multi-cultural (interaction with people with different cultures), multi-institutional (1 student studying in more than 1 institution) or multi-stage (which includes continuous learning throughout life) (Garza, 2021).

Although this means that universities will no longer be solely responsible for preparing business specialists, their role will continue to be important. The responsibility for training the main skills that the labour market will demand of professionals will continue to be placed on them. According to the World Economic Forum (WEF, 2020) the 10 skills most expected of graduates in 2025 will be grouped into 4 areas: those related to problem solving, the ones used while working with people, the use of technology and self-management. Many of those skills can be created or strengthened by leveraging international collaboration.

In the European environment where exchange programmes between students under the Erasmus programme are very popular and financed by different scholarship systems, more students have the opportunity to go out and study abroad. In the case of Latin American universities where the exchange programme is not always very extensive or the socioeconomic level of the students not always allows them to cover the cost of studying abroad, other forms of internationalisation of students are sought in the teaching-learning process.

This article describes the collaboration between professors at the Business School in Mexican and American universities under the model of the Collaborative Online International Learning (COIL) over five years. It is shown that this type of collaboration allows students to develop several of the important skills (critical and analytical thinking, use of technologies or an ability to work with people in multicultural environments) when developing different types of projects in the framework of an international course of business working in international teams in person and online, which was defined as two different collaboration models: In Person COIL and On Line COIL. Additionally, the results and recommendations for the application of this model in the future are presented.

COIL methodology

The Collaborative Online International Learning (COIL) is a teaching methodology that has gained popularity in recent years. It is not a particular technology nor a technological platform, but a different teaching-learning technique that aims to develop a shared intercultural awareness in the multicultural learning environment. The origins of COIL in the USA date back to 2007, when after a conference at Purchase College in Westchester, the SUNY COIL Center¹ was created at SUNY University in New York. The main focus of this methodology lies in providing the internationalisation component in the learning process to ‘non-mobile’ students, that is, those who for different reasons cannot or do not want to go abroad (Marcillo-Gómez & Desilus, 2016). The term ‘collaborative online learning’ combines the following main dimensions of real virtual mobility, such as: a real collaborative exercise of professors and students, the interaction and use of online technology, the development of real and potential dimensions, as well as the integration into the learning process. Unlike learning methods such as blended learning that combines the delivery of the same course in person and online (Sharma, 2010), distance education where the students lack direct contact with the instructor and their learning process is based on self-study or e-learning where technology becomes the main tool for providing knowledge (Moore, Dickson-Deane, & Galyen 2011), the COIL methodology provides the students involved with direct contact with the teachers and allows them to take advantage of learning the content of different courses. Technology is understood only as a means that facilitates communication and development of collaborative learning.

As defined by the SUNY COIL Center, international collaborative online learning helps students develop intercultural awareness and communication skills, proportionally and efficiently; it fosters their appreciation for different backgrounds and perspectives, broadens and strengthens students’ understanding of the discipline studied, encourages them to use technological tools for collaboration, communication, and learning, finally, with all these actions, to prepare them to work in a multicultural and interconnected world.

In the COIL model, students from different cultures are enrolled in courses taught by professors from two or more countries who jointly teach the course and share the obligations. That type of course model does not merely promote classes where students from different cultures just share the same virtual classroom, but rather create shared learning environments where instructors work together, creating

¹ The information cited from the SUNY COIL Center comes from the page of said institution: <https://coil.suny.edu/> consulted on different occasions: June 2017, August 2019, and January 2022.

common content based on academic work, together, taking advantage of experiential learning and coexistence among students.

COIL courses and the projects developed in them can vary in duration: from several weeks to a full semester, be synchronous or asynchronous. This type of course can take the form of a 100 percent online course (using only different forms of communicating with the use of digital technology such as: videoconferences, online discussion groups, Google Hangout meetings, WEBEX sessions, Skype, Zoom or Teams) or be offered in more sophisticated formats with face-to-face sessions that take place at both universities, while collaborative work takes place only online. Although in this type of course the instructors work together with the students from both universities, in most cases, the students are enrolled and pass the corresponding subject at their home university. These types of courses transmit to their participants the deepest understanding of ideas and texts, while creating the possibility of developing intercultural, teamwork, and problem-solving skills. In addition, this model promotes and offers the opportunity for the faculty of the participating universities to develop the same type of competencies in the professors.

Much of the literature on COIL focuses on its benefits, primarily for students. The first benefit lies in the fact that globally interconnected classrooms prepare students to work in globalised environments (Rubin & Guth, 2015). It sensitises them to the existence of different teaching-learning processes in different countries and, therefore, different ways and customs of work. Another benefit emphasised by different authors (Siemens, 2002, 2005), points to different aspects of active and collaborative learning, thanks to the creation of a kind of community among the participating students, which in turn helps them develop critical thinking skills, strengthen self-confidence, and increase their cognitive abilities. Additionally, COIL taking advantage of online tools, contributes to strengthening the knowledge of foreign languages (O'Dowd, 2007; O'Dowd & Lewis, 2016). To conclude, a well-designed COIL project allows students to create an attractive, reflective and experiential learning widely recommended in the book *Collaborative Learning Techniques* (Barkley et al., 2014) to focus the teaching-learning process on the student, which reflects the trends of current pedagogical practices in teaching. Although COIL projects can be applied in any academic career in teaching, in the business area where graduates will be more exposed to multicultural environments, their application can give more benefits.

According to the information from the SUNY COIL Center (2017), there are three different types of COIL. The first one of them is the 'On Line' type, where two or more groups of students residing in different countries and two or more professors, who teach and manage the course, are involved. The entire process of interaction and teaching take place online. Course content can be identical for all students or specific to each group.

The second type is the so-called ‘Dual Hybrid’. Here, two or more teams of students residing in different countries are enrolled in the course with professors responsible for its development at the universities involved. Each group of students meets regularly in face-to-face sessions with their instructor, while larger groups work together developing online projects. In the latter case, the content of the course for all students does not necessarily have to be totally identical: it is enough to share some units – but what does have to be identical are the joint tasks. In these types of courses, students are evaluated separately at each university and pass their own courses at each of them.

The third type called ‘Carrot’ is not really a different model but one that tries to reinforce the collaborative work process of the previous models, adding a special incentive to students’ experience for their participation. In this model, one or more students from each of the participating institutions are offered the opportunity to travel to their counterpart’s foreign university to present their final project and meet their teammates face-to-face. This end-of-semester trip can be financed from the course budget or by the students’ own means. If financed by the institution, it must be in the form of an award for outstanding work performance during the course. The visit lasts an average of 5 to 10 days and the students usually stay in the homes of their colleagues or university residences.

Mexican-American COIL experience

The COIL courses implemented between the Business Schools of the Tecnológico de Monterrey, Campus Monterrey (México) and Trinity University in San Antonio Texas (USA) have had several editions so far.

In the editions of January–May 2017 and August–November 2019, the In Person COIL was implemented. On those occasions, in the COIL project, two courses with partially similar contents were joined: on the Mexican side, the course called *International Business Development*, offered for students in the fourth semester of Bachelor in International Business, and on the American side, the course *Doing Business in Latin America*, for students from all the majors of the American university within the LAC programme (Languages Across the Curriculum), where classes that are not specifically languages (such as this one, *International Business*), are taught in a language other than English. The specifics of both courses² focused on

² In the case of Mexican students, being students of the *International Business* major, the content of previous subjects provided them with sufficient knowledge to develop an export plan, while in the case of American students, the content of their course included theoretical information about international transactions, international administration, and international finance.

international business, allowed to focus the collaborative work designed for students to develop a business plan for the export of a Mexican product to the US market or an American product to Mexico or any other Latin American country. The project had to be developed for a real company, taking into account a medium-sized company that had not exported its products until then and was interested in exporting in the near future. The export plan should be developed through joint work online, but with support in face-to-face sessions that took place during two reciprocal visits of full groups planned to the participating universities: that of the American group to Monterrey and that of the Mexican group to San Antonio. It was determined that the students would develop the business plan simultaneously in two languages, Spanish and English. Regardless of the joint project in each university, the academic content of both of subjects provided by each university was met.

Given the concept of the course which included the trip of the entire group of students to San Antonio, TX, scheduled during the semester, it was decided at the Mexican university to select the students to participate in the project who met the requirements of an average above 85³ and had a valid passport and visa to enter the US, also agree to cover expenses related to travel in addition to the cost of the course. It is worth mentioning that four students who met the requirements, but who could not afford the trip, received a scholarship on behalf of the Tecnológico de Monterrey.

For the development of the COIL project in these editions, 18 students participated in both institutions, which allowed the creation of 6 teams of 6 members: 3 from each university. Two WEBEX sessions took place in the second and third week of classes. The first was aimed at getting students from both sides to know each other. Between the first and second sessions, teams were formed with the aim of working online on a proposal from a company and its product for the development of the export plan, which were presented during the second WEBEX session. Subsequently, asynchronously and using various electronic forms of communication, the teams worked on the development of their business plans with the guidance of the course instructors. During the visit to Monterrey of the Trinity students, the first presentation took place. In this case, it was in Spanish, on the progress of the projects, in front of the joint team of professors from Monterrey and San Antonio, who accompanied the group. The second presentation, the final one, on this occasion in English, took place in San Antonio during the visit of the Technological students to Trinity. In 2017, when the project was developed in the January–May semester, the projects were included in the entrepreneurship contest at Trinity University known as the Stumberg Prize, for which the projects were presented in front of the jury of that

³ The assessment scale at Tecnológico de Monterrey is from 0 to 100, with 70 being the minimum passing score.

contest. In the second edition of 2019, the projects were presented in front of the responsible professors involved in the COIL project and professors from the business area of Trinity. On both occasions, the written project was delivered simultaneously to the professors responsible for the courses at both universities and was evaluated jointly as part of the final evaluation of each course.

The arrival of the COVID-19 pandemic forced to modify the previous way of working on the project-In Person COIL to an On Line COIL project. The face-to-face part of the previous model consisting of trips between both universities had to be eliminated and the type and content of the project had to be adjusted. The change of activities in both universities from face-to-face to virtual influenced the change in the offer of the courses provided by the institutions involved, which in the semesters August–November 2020 and August–November 2021 implied an adjustment in the courses that involved the students enrolled in the COIL project. Unlike the previous courses, which shared part of the content and allowed students to have similar knowledge for the development of the export business plan, the new ones (*Competitive Intelligence* by Tecnológico de Monterrey and *International Finance* by Trinity) did not share any common content that would allow students to develop a project throughout the semester. Therefore, a new COIL project (different in each of the editions) was designed, this being a partial project to be developed equally by the students, in international teams, outside the official class sessions for 7 weeks. The COIL collaborative project in that case consisted of the selection of a suitable country for the expansion of a real company (in the form of exports or foreign direct investment) based on environmental analysis and financial analysis. This structure of the project required sharing the knowledge included in both courses, so the students had to mutually explain the content necessary for its development and solution of the one they did not take in their respective courses. The new structure of the project required greater collaboration between the parts of the team since they had to adjust the ways of working in the 2 institutions in the time of the pandemic, which was reflected, among other things, in different ways of developing and presenting the projects, different ways and work schedules, degree of academic demand, relationship between theory and practice in the development of work. Additionally, they were limited to forms of remote communication, forcing participants to share or modify communicators that they were used to using.

Given the totally virtual nature of this project, it was no longer necessary, on the Mexican side, to carry out any type of special pre-selection of the participants. Therefore, in each of these projects, 2 groups of current students of the same subject were involved in each of the institutions, with more than 100 students involved in each of them. The students involved in both universities were those from the business area in general, from different semesters. Taking into account the highest number

of participants, the work was carried out, on that occasion, in slightly larger teams (from 6 to 7 participants in 2020 and from 7 to 8 participants in 2021). In the case of a shorter project, it was presented only once in a virtual format in front of both teachers only. On that occasion, the COIL project was developed in a single language, English, for both its presentation and for the written report. The presentation time was defined in advance as well as the requirement that the Mexican members of the team had to present the part of the project developed with the knowledge acquired in the course of the American part, while the American members of the teams presented the part based on knowledge, which is part of the Mexican course. In a similar way to the previous edition, the written project was delivered simultaneously to both professors, it was evaluated jointly and received the same weight in the final evaluation of both courses.

Evaluation of results

In all the editions of the COIL project, the main objective was fulfilled: to promote collaborative work using different forms of remote communication. According to the comments expressed by the students, the experience was to their liking. “I really liked being part of both COIL projects. I feel that it was a good opportunity to share my knowledge with colleagues from Trinity, to learn how students work at other universities. I especially liked the first project (In Person COIL), since we were able to share with the whole group, we had opportunities to visit their campus and learn a little about their student environment” – said Jorge Valdés, a 7th semester *International Business* student who participated in both types of the COIL project. Additionally, working on this project served the participants as an experience of working with people from different cultures, even though the American group sometimes included students of Latin American origin. The participants pointed out the need to convince their counterparts to their ideas, make them understand their points of view and way of seeing things from a different perspective than their own, for example in the case of selecting a product or company for the export plan (In Person COIL) or the interpretation of economic indicators (On Line COIL). In the case of In Person COIL, where the teams had to develop export plans for real companies, for some of them, this meant developing a more complex project than previously customary, as well as dealing for the first time (in some cases) with people from the real business world, since the teams had to be in direct contact with their companies, including visiting them whenever possible. In the In Person COIL projects carried out before the pandemic, the visits of students between both universities allowed the students of each group to meet personally, share, in addition

to being able to partially develop their projects in person. The experience obtained in the courses can be enriched by visits to multinational companies that operate on both sides of the border (HEB supermarket network, Toyota and KIA automotive companies) allowing students to visualise how the different economic, legal, and cultural factors in both countries forced those companies to adjust their operations.

In the On Line COIL projects, the students emphasised the strengthening of communication using electronic means and the use of the English language. Even though communication focused mainly between the members of the teams themselves for the development of the projects and in the communication between teams and their teachers, the use of English became a challenge for the Mexican students because, as some pointed out, it was the first time that they had to actively use it during their undergraduate studies. Despite this, most of the students on the Mexican side had an excellent command of the English language, which was confirmed during the presentations. Another aspect that could be verified was that the students managed to understand the importance of statistical data analysis for decision making in the development of their projects.

These opinions confirmed what was expected at the beginning of this project that its development will strengthen the participants in soft skills such as: teamwork, use of technology, problem solving or critical thinking, which were mentioned above as benefits of this type of teaching technique.

Recommendations

In order for COIL projects to develop successfully, certain considerations must be taken about each phase of their development; that is, to have a clear vision about its concept, to meticulously comply with all the corresponding points in the planning phase of the project, its development, and after its completion (Geron, 2021).

The first important point is the correct selection of the counterpart. This selection includes, on the one hand, the choice of the educational institution in another country that shares the interest in the development of this type of project and, on the other hand, the selection of the collaborating professor responsible for the course in another institution. This selection is of utmost importance since the development of the COIL project requires much more effort and time involved by the professors compared to an ordinary course. As to In Person COIL projects the main problem in finding a suitable partner is related to coordination. Although the need for coordination of a project in case of two separate courses seems obvious, carrying it out successfully can be complicated. Very often professors tend to be very protective of their courses. All the contents of our courses have their reasons for being, so giving sovereignty

over them to a collaboration under the COIL project can be difficult and not only at the time of planning but also in the execution of the COIL.

Knowing the collaborating teacher well is of much help in the planning phase in order to define the type of project, its content, the form of its development, its structure, and the levels of demand. It should be visualised which courses at both universities will be involved in the project, what degree of compatibility they present, students from which semester they will involve and what the language or languages of the project will be. It should be noted that if English is selected as the language of the project, it is very important to assess the degree of its mastery by the students in the event it is not their native language, since it is considered that insufficient command of English can be the main barrier in the development of the COIL project. It is also important before presenting the project as part of a common course to define the details related to the importance of the COIL project in the evaluation of the courses involved (preferably that they are the same to provide the same degree of motivation in the students) and to design in a detailed way an evaluation rubric of the project including the part related to the content, the presentation, the format of written report and aspects related to the collaboration between the teams, between members of both universities. At this stage, it must also be decided whether grades will be awarded to participating students individually, to half of the total international group in each class, or to the entire international team. In the case of the collaboration described, it was decided to grant the same grades to all the international teams as a unifying element, in addition to helping to minimise subjectivity in the grade, since both teachers need to find a grade and a consensus answer for the teams. In addition, in the implementation stage, to avoid misunderstandings in the implementation stage, it is preferable to define among the teachers who, based on their expertise, is responsible for clarifying doubts regarding each of the parts of the project. In this phase it is also important to define if and what type of support will be needed from the institutions in the development of the planned project: for example, in the case of the In Person COIL projects that included visits between the universities, the support of the institutions was required to get accommodation, food, transport or support in getting visits to local businesses. In the case of virtual projects, support was required in the organisation of long-term virtual sessions (between 3 to 4 hours) for the presentation of the projects, which required premium licenses for the sessions. It is very important that all the details of the project are as clear as possible for the participants and that they do not undergo substantial changes during its development.

In the development part of the project, communication between professors is of great importance so as not to create distortion in the flow of information between parts of the teams. Even taking the best care of details in the planning phase, in the

execution phase unforeseen details arise that must be resolved and, therefore, will require communication channels between the professors in charge and the ability to react quickly and in a coordinated manner, in addition to mechanisms established to resolve conflicts that may occur. It must be remembered that the common front of the professors in this type of project is of great importance because the students can seek to find points of friction between their professors to facilitate their work.

Another important aspect that requires time is the coaching to the teams. In the case of projects that cover the entire semester, a presentation of the progress of the project is suggested more or less in the middle of the period with the objective, on the one hand, of determining their progress throughout the semester and on the other, to give students the opportunity to detect errors and correct them before their final submission. In the case of projects that require direct contact with the companies for which they are developed, it is important to obtain their consent on the development of said projects and their commitment to provide the required information and reiterate the commitment of the university, of the teams. The developed projects will be delivered to the companies. To give greater importance to the final presentation of projects, it can take place in front of a committee that includes, in addition to the professors, the representatives of the companies involved in the corresponding projects or other members of the faculty. Both the presentations and the written reports must receive positive feedback and joint evaluation according to the rubric previously designed and delivered to the teams.

Conclusion

Although the COIL methodology can be applied in any area of study, in the business area its usefulness is more visible given the presence of the globalisation of work environments. It is a useful tool in the process of internationalisation for students who for various reasons cannot go abroad; it helps students to understand in a deeper way the ideas and theoretical knowledge of courses by incorporating joint projects developed in multinational teams that allow them to develop intercultural skills, teamwork communication skills or problem-solving skills. As it can be seen, this learning methodology strengthens the development of the skills expected of future professionals such as active learning, critical thinking or the use of technology. The COIL methodology is adaptable to the expectations that universities may present to the objectives that they want to achieve and the conditions to which it can be applied as long as the critical points for its development are kept in mind.

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