

COIL AROUND LATIN AMERICA

Collaborative Online International Learning (COIL) around Latin America

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Declaration

I hereby declare that my research report entitled:

Collaborative Online International Learning (COIL) around Latin America

- is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared and specified in the text.
- is neither substantially the same as nor contains substantial portions of any similar work submitted or that is being concurrently submitted for any degree or diploma or other qualification at the Universidad de La Sabana or any other university or similar institution except as declared and specified in the text.
- complies with the word limits and other requirements stipulated by the Research Subcommittee of the Department of Foreign Languages and Cultures.
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Abstract

This research study reports the findings obtained from the intervention carried out to identify the characteristics of courses described as Collaborative International Online Learning (COIL) and to determine the factors that influence the implementation of COIL courses from the perspective of Latin American teachers and students. First, the researcher conducted a web search to localize potential participants and after sending a letter of invitation, teachers from Argentina, Colombia and Mexico accepted. The study followed a qualitative and exploratory approach, but also collected a portion of quantitative data. Subsequently, the research instruments applied after a piloting process were a semi-structured interview for teachers, a documentary analysis for COIL planning and a Likert questionnaire to collect students' perceptions of the COIL experience in which they participated. The findings of this study showed that COIL involves three main phases of development and that, among these phases, collaborative work, intercultural competencies, cross-cultural competencies, and global competencies are the cornerstones of the approach. In addition, factors influencing the implementation of COIL included formal training and professional development of the approach, institutional support, time constraints, and quality of communication with partner institutions. These results contributed to the current spectrum of COIL and, at the same time, provided guidance for professionals interested in incorporating it into their pedagogical practices. For future research, it is recommended to collect data on COIL cases in Colombia considering public institutions, training courses available for teachers on the approach, the emphasis of COIL applied in the field of teaching English as a foreign language (EFL), and the use of COIL at other educational levels such as primary and secondary education.

Key words: Collaborative Online International Learning (COIL), teaching approach, virtual exchange, internationalization of the curriculum, higher education.

Resumen

Este estudio de investigación reporta los hallazgos obtenidos de la intervención llevada a cabo para identificar las características de los cursos descritos como Aprendizaje Internacional Colaborativo en Línea (COIL) y determinar los factores que influyen en la implementación de los cursos COIL desde la perspectiva de profesores y estudiantes latinoamericanos. En primer lugar, el investigador realizó una búsqueda en internet para localizar a los posibles participantes potenciales y tras enviar una carta de invitación, profesores de Argentina, Colombia y México aceptaron. El estudio siguió un enfoque cualitativo y exploratorio, pero también recogió una parte de datos cuantitativos. Posteriormente, los instrumentos de investigación aplicados tras un proceso de pilotaje fueron una entrevista semiestructurada para los profesores, un análisis documental para la planificación del COIL y un cuestionario Likert para recoger las percepciones de los estudiantes sobre la experiencia COIL en la que participaron. Los resultados de este estudio mostraron que COIL implica tres fases principales de desarrollo y que, entre esas fases, el trabajo en colaboración, las competencias interculturales, las competencias transversales y globales son las piedras angulares del enfoque. Además, dentro de los factores que influyen la aplicación del COIL se destaca la formación formal y desarrollo profesional del enfoque, el apoyo de las instituciones, las limitaciones de tiempo y la calidad de la comunicación con las instituciones asociadas. Estos resultados contribuyeron al espectro actual de COIL y, al mismo tiempo, proporcionaron una guía para los profesionales interesados en incorporarlo a sus prácticas pedagógicas. Para futuras investigaciones, se recomienda recopilar datos sobre los

casos de COIL en Colombia considerando las instituciones públicas, los cursos de formación disponibles para docentes sobre el enfoque, el énfasis de COIL aplicado en el campo de la enseñanza del inglés como lengua extranjera (ILE) y el uso del COIL en otros niveles educativos como la educación primaria y secundaria.

Palabras claves: Aprendizaje internacional colaborativo en línea (COIL), enfoque pedagógico, intercambio virtual, internacionalización del currículo, enseñanza superior.

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Chapter 1: Introduction

1.1 Introduction to the study

In Colombia and other Latin American countries English is learned as a foreign language and having as a reference the standards provided by the United Nations (2015), the OECD (2019) and the prominent influence of the digital world in education, learning environments are encouraged to include experiences that go beyond the academic component. Over the years the implementation of various language teaching approaches has been explored, Liu (2023) said that “COIL has attracted increasing attention from foreign language educators and research” (p.1). Therefore, Collaborative Online International Learning (COIL) is one of the current approaches adopted for learning English as a Foreign Language (EFL) mediated by technological resources (Carlisle & Sáenz, 2023., San Martín et, al., 2023). This research emphasizes on identifying COIL courses in some Latin American countries and the factors that might influence their implementation.

Hence, this qualitative exploratory study includes a review of the trajectory of the COIL approach and the study arose from the lack of knowledge regarding the state of COIL in the Latin American context. Although there were studies in the national and international contexts that expose the benefits and challenges of using COIL there was not enough record in characterizing the courses labeled as COIL nor the possible factors that hinder its use. The qualitative data was gathered through a semi-structured interview applied to teachers, a documentary analysis based on the course planning or syllabus, and quantitative information was collected by a questionnaire that used a Likert scale to complement the study by integrating the students’ perspectives towards the conducted courses. The findings revealed that the implementation of COIL in the Latin American EFL context exists. Likewise, they contributed to

the current state of COIL showing that despite the approach has been little explored in terms of characteristics and factors that influence its use, there are several COIL cases in Latin American countries and outcomes from pedagogical practices that indicate an important demand level.

1.2 Overview of previous relevant literature

The rise of the COIL approach has called the attention of different institutions and as a response there have been created networks to do research, divulge academic events, share experiences, for professional development, to promote and support new contributors and COIL initiatives. The available literature shows COIL, internationalization, intercultural skills, sociocultural topics, higher education, virtual exchange, and collaboration as major concepts that emerged due to globalization, defining COIL as a cross-disciplinary approach that can be integrated into teaching practices considering the context (Rubin, 2017). These previous studies revealed the benefits, strategies, and some conditions to conduct COIL in various fields of knowledge covering local and global needs. This research study sought to identify characteristics of courses described as COIL and determine the factors that may influence its implementation from both students and teachers' views. Throughout the literature review it was possible to discover the nature of COIL and specific factors that support, interfere, and challenge the implementation of COIL in interdisciplinary fields.

1.3 Overview of method

The spread of globalization has influenced the dynamic of education, leading educators to incorporate new mechanisms of interaction by using the support of technology. Rubin (2017) described COIL as an emerging pedagogy that promotes virtual exchange. In this context, the COIL approach has emerged as an alternative to provide EFL learners with the opportunity to participate in a learning environment where participants from different linguistic and cultural

backgrounds cooperate in the development of academic projects. COIL is an emergent area to promote virtual exchange particularly in the Latin American context, however, in 2020, the LatAm COIL network was founded to promote these exchange practices in Latin American countries (King Ramirez, 2022). Considering the scarcity of information about how COIL courses work, the present qualitative and exploratory study aimed to fill this gap by characterizing the courses described as COIL in the Latin American region as well as identifying the factors that might influence the success of designing and implementing COIL courses. For this purpose, a semi-structure interview, documentary analysis and a questionnaire were applied. These data collections instruments support the success of the study by examining both parties, teachers and students' views as well as the revision and comparison of the COIL planning and syllabi adopted per course.

1.4 Overview of results

From the data analysis procedures there were generated memos per each instrument which became codes with rich information about the studied phenomenon. The codes were grouped, and they formed three major categories: (a) Collaborative Online International Learning embraces three main phases of development (b) collaboration and cross-curricular skills are cornerstones in COIL (c) essentials to design, implement and participate in COIL courses. The data revealed that COIL courses are well-structured and follow three phases of development with defined objectives emphasizing on the need of previous preparation for the cultural exchange, providing various learning activities and the selection of accessible platforms. Moreover, it was discovered that a COIL environment instead of including only academic topics, COIL courses comprise the acquisition of cross-curricular skills such as intercultural, self-regulated and soft skills, assertive communication, and global skills mediated by technology as a third culture.

Collaboration was also pointed out as a prominent characteristic of COILs, but students need to be equipped with appropriate support, strategies, and tools to make the teamwork and interaction successful. Similarly, the assessment shifts from summative to formative since the cultural component is complex to assess and there is no way to grade beliefs or customs as right or wrong. Aligned with this, there were noticed explicit factors that might challenge, hinder, and support the use and participation in COIL. Hence, the curriculum and the planning or syllabus are fundamental to connect and collaborate with another institution. Besides, formal training, available resources, time constraints and institutions endorsement were the most mentioned aspects by teachers to be required in the design and implementation of COIL courses. These findings filled the existing gap by describing COIL courses in detail and naming the major factors that influence its application in Latin America.

1.5 Overview of discussion

The contributions of this study broaden the scope of COIL by identifying specific characteristics of COIL courses and the factors that affect their implementation. Based on previous literature, there were found some similarities in terms of defining it as a non-conventional teaching approach, the benefits, and outcomes of using it, and some discrepancies related to the detailed structures of different COILs in three Latin American countries. The findings exposed that professionals should have a constant and assertive communication with their international peers; but also, it is requested the institutions' support especially in adopting COIL as an institutional strategy to succeed in the designing and implementation of these global online courses. Updated knowledge emerged from the present study to provide future researchers with more data and references to carry out a new study. Hence, throughout this study, it was also possible to identify other fields that require further attention. For instance, exploring COIL

focusing on the EFL context, the feasibility to use it at other levels such as primary and secondary education, the current state of COIL in Colombia, the available resources and courses that support and train professionals on this matter are fields that need depth inquire.

Besides, to indicate the limitations experienced during the development of the research project, it is worth mentioning that the researcher did an exhausted web search to identify COIL courses and international partnerships with their corresponding email address to invite them and agree on a day to meet, however most of the emails did not receive a response. Some technical problems related to the absence of a license for the zoom platform to apply the instruments, and the difficulty in finding student participants, since all COIL courses included in the present study were conducted during 2022 and 2023. Lastly, the sample size was somewhat small, therefore the researcher recommends conducting a study with more participants from different countries as well as involving students from each course as representatives and direct witnesses of the COIL learning experience. In this sense, it would be reasonable to develop a mixed study that could cover both perspectives equally on the unexplored fields mentioned above.

1.6 Conclusion

This qualitative and exploratory study aimed to identify the characteristics of COIL courses and determine the factors that affect its design and implementation in the Latin American context. The study focused on filling the existing gap in literature by describing these courses and gathering data from a total of eight teachers and students' participants who took part in the learning experience of these environments. To achieve the research objectives, professionals from Colombia, Argentina and Mexico shared their experiences from their specific disciplines following a set of variables. From the published literature can be drawn the nature of COIL as a flexible, innovative, multicultural and collaborative learning environment that fosters virtual

exchange at higher education where not only academic competencies, but also soft and citizenship skills are developed based on the globalization phenomenon, the influence of the digital era and socio-cultural diversity (Gallego et al., 2023; Velázquez, 2021). Accordingly, merging COIL and technology contributed to cross-curricular and interdisciplinary knowledge (Pérez, 2023). During the revision stage it was necessary to contemplate the state of the three main frameworks: Collaborative online international learning (COIL), internationalization of the curriculum (IC) and virtual exchange (VE) from national and international lenses in terms of effectiveness, outcomes, fields of knowledge, partnerships, activities and skills developed. The previous revision set a background revealing the connection and interaction between the frameworks VE, and IC under the COIL umbrella.

Chapter 2: Literature Review

2.1. Introduction

This chapter entails an overview of the main topics addressed in this study, and it provides a review of the current literature obtained by the revision of previous studies on COIL from national and international lenses. This part makes visible initiatives, trajectories, and challenges by exploring several authors and COIL experiences. Nowadays, one of the most controversial and remarkable changes has to do with the use of technology in education. “Digital technologies have brought changes to the nature and scope of education.” (Timotheou et al., 2022, p. 6696). Likewise, technology has been adapted to respond to society's knowledge demand and as a bridge to foster learning environments aimed to develop cross-curricular competencies in students. As established in the United Nations (2015) it is now beneficial for learners to acquire not only academic but also transversal skills that support them in different scenarios of life. For example, the Sustainable Development Goals must be achieved by 2030

and they include quality education and collaboration. To this purpose, there is a call for all countries to implement strategies that contribute to this agenda, and this suggests that one of the above goals requires the use of technology as a means of communication and teamwork. This is also linked and supported to the claim shared by the OECD (2019):

The 21st century is characterised by interdependence among nations facilitated by global communication... It is also the age of accelerated technological innovations, such as cyber physical technology, social media, artificial intelligence... In the education sector, some changes are already emerging. Schools are no longer seen as closed entities in themselves, but as part of the larger eco-system in which they operate. Some schools collaborate with each other, forming networks or partnerships with other schools. (p. 11).

The above quotes indicate that basic skills should be complemented and accompanied by practical and more advanced skills such as digital literacies, problem solving, research skills, intercultural competencies, and collaboration also known as the 21st century skills to name a few. To accomplish the agenda and standards proposed by both organizations, institutions should support educators' initiatives that encompass these abilities.

Similarly, emerging teaching trends have gained a wide interest especially since teachers become aware of the need in designing and conducting approaches that cover the current needs in an interconnected world. Mobo (2021) highlighted the important role of emerging pedagogies since they incorporate technology taking advantage of the available digital resources.

Collaborative Online International Learning (COIL) is part of the tendencies in the field, this approach is mediated by technology and allows participants to interact in a moderated environment where several competencies especially cross-curricular skills are activated, strengthened, and developed. According to Rubin (2016) the State University of New York (SUNY) created a center focused on COIL merely. The author claimed that COIL courses are

designed by teachers from different countries having a common syllabus as a reference to develop the international collaboration. Based on this, some of the COIL components include the exchange promotion between two or more educational institutions with their own cultural background and the diffusion of the curriculum among the involved institutions to agree on specific objectives to fulfill during the development of the COIL course. Hence, the spread of all the aforementioned components implies the existing challenge of updating, accessing and evolving with regard to the learning performance in modern society and the responsibility of preparing global citizens around the world. Subsequently, the research questions that addresses this study are: what are the characteristics of courses described as COIL in Latin America? And what factors influence the implementation of COIL courses from Latin American teachers and students' perspectives? Followed by the research objectives (a) to identify the characteristics of courses described as COIL in the Latin American context and (b) to determine the factors that might influence the design and implementation of COIL courses.

2.2. Theoretical framework

2.2.1. Collaborative Online International Learning (COIL)

The term COIL “was coined in 2006” but recently it is denominated ‘virtual exchange’ (Rubin, 2017, p. 29). This approach is highly supported by SUNY university that counts with the SUNY COIL center and website which promotes three main ideas namely connect, engage, and collaborate. In parallel, Appiah-Kubi and Annan (2020) claimed that “COIL is a pedagogy that helps to create an environment to foster the development of intercultural competence skills with the use of technology to connect classrooms in distinct geographical locations” (p. 109).

Likewise, the main objective of COIL is to provide interactions between participants with different linguistic and cultural backgrounds (de Wit, 2018). That is why it is vital that strategies

and guidelines can be provided to guarantee assertive communication as one of the ways to succeed in virtual exchange.

Besides, COIL is positioned as an educational choice not only for teaching content, but also for the acquisition of tools, strategies, and skills thanks to the exposure to mediated scenarios to face daily life situations. “COIL is not a technology or a technology platform but rather a new teaching and learning paradigm that develops cross-cultural awareness across shared multicultural learning environments” (Rubin, 2017, p. 33). Accordingly, it is now an endeavour for educators in the different disciplines of knowledge to examine the effectiveness of COIL in their contexts putting in action those published ideas and alternatives that attempt to respond to the interconnected world’ needs.

Additionally, COIL is characterized by specific components that are well exposed in Zhang, J., and Pearlman’s (2018) study, “collaboration is essential to the success of a COIL course, from planning to instruction and assessments. Faculty from both partner institutions work closely together to develop a joint syllabus during the planning stage” (p. 6). Thereby, the role of the different stages and the nature of the institutions’ curriculum to design and implement the COIL course seems to be fundamental in triggering beneficial outcomes. Lastly, Ingram et al., (2021) pointed out that “COILs are a teaching and learning paradigm that offer collaborative student learning opportunities as well as global, intercultural exchange, that take advantage of distance learning and technology” (p. 4). “In 2020, four universities, Universidad Veracruzana, Universidad de Monterrey (Mexico), Instituto Tecnológico Metropolitano de Medellín (Colombia) and Universidad Estadual Paulista (Brazil), founded the Latin American Network for COIL” (de la Garza & Maher, 2022, p. 35). From a global perspective, the COIL approach has come to expand the horizons of learning by enriching and providing affordances to interact and

building networks of learning exchange with the slogan that “COIL is about connecting across difference” (SUNY COIL center).

2.2.2. Internationalization of the curriculum

First of all, it is pertinent to provide some definitions of the curriculum in education since the concept is not addressed homogeneously due to its complexity and the fact that it entails a wide range of elements. “Curriculum” is a description of what, why, how, and how well students should learn in a systematic and intentional way” (UNESCO, 2016, p. 16). That is to say, curriculum is the starting point, overview of principles, procedures and strategies and guidelines to carry out any educational process. In the same line of thought, Annala et al., (2016) pinpointed that “it is through curriculum that the core of the discipline is put into practice. Thus, there are huge expectations of curriculum in regard to students’ learning, universities, and society” (p. 171). From these conceptualizations it is possible to state that the design or adaptation of the curriculum influences education and its quality to a great extent. Now, the phenomenon of internationalizing the curriculum in education is attributed to the growth of globalization, especially in higher education (Leask, 2015). The author explained in her book that the internationalization of the curriculum should be adopted as an institutional strategy based on achievable objectives, appropriate approaches and integrating global dimensions.

Nonetheless, the internationalization of curricula is a process of analysis and reflection that possesses difficulties, challenges, and strategies. As Moshtari and Safarpour (2023) reported, this is not a practice available for all contexts considering the existing gap between developed and developing countries. The demand for economical support in the less privileged institutions and the urgency to evaluate and propose policies that promote worldwide connections to overcome inequalities in education by offering opportunities. Internationalization is also linked

to the mobility caused by students, Fragouli (2020) focused on the lack of a more suitable framework to combine this practice from a more critical and broad perspective, the author asserted that “internationalisation has recently expanded to what students learn, how they interact, and what values their programme promotes” (p. 29). Therefore, more efforts should be made to ensure that the experience is rewarding for teachers and students at the same level. Finally, following Ndaipa’s et al., (2023) insights, it was found that the internationalization process should supply both global and local dimensions as well as make sure that contributors and policy makers are conscious of the educational systems to balance the practice among the institutions in charge of developing the internationalization of their curricula.

2.2.3. *Virtual exchange*

Technology as a means of communication worldwide has contributed to the adoption of more prepared and updated strategies to facilitate the connection among countries in terms of pedagogical purposes.

Virtual exchange (VE) involves the engagement of groups of learners in extended periods of online intercultural interaction and collaboration with partners from other cultural contexts or geographical locations as an integrated part of their educational programmes and under the guidance of educators and/or expert facilitators. (O’Dowd, 2018, p. 5).

Subsequently, several platforms and websites intend to promote collaborative practices, provide resources and evidence to make those practices replicable. Ala-Kortesmaa and Muñoz (2023) claimed that “computer-mediated communication in its various forms has become a shared virtual place where meaningful cross- cultural experiences can occur... Almost all virtual exchange experiences rely on communication between the participants” (p.49). This is a relevant

statement that reveals the dynamic of experiences moderated by technology and exposes how digital sources are now part of the culture.

Another advantage as indicated by Hernández-Nanclares et al., (2019) is that “certain restrictions may exclude possible candidates from physical mobility” (p. 142). In other words, the main spectrum of the VE comprises the intercultural dimension, and it mitigates and tackles barriers using the digital world as an instrument. This way, participants in the exchange are in real contact and communicate with other countries, traditions, identities, foreign languages, time zones among others to carry out a project or task collaboratively through different digital resources in a synchronous, asynchronous way or both. In regard to the activities involved, O’Dowd (2021) noted that there is not agreement regarding the generated outcomes in a VE:

The heterogeneous nature of exchanges can make it difficult to draw reliable conclusions as to the efficacy of particular models or configurations of telecollaborative learning. Virtual exchanges can differ according not only to class and learner profiles, but also according to the task sequences, the type of technologies and the manner in which their learning outcomes are evaluated. (p. 2).

Although the emergence of virtual exchange possibilities is growing along with networks that represent some countries, there are just a few programs devoted to professional development on the matter, Ramirez and Bustos-Aguirre (2022) stated that most of the available training courses on COIL are the result of an institutional strategy therefore, the designed COIL courses are mainly oriented to this specific professional population. In the same regard, Quintana-Ordorika (2023) pinpointed that it is pertinent to include teachers in training in the development of COIL workshops, this suggests that these initiatives are able to permeate other external educational institutions and teachers, but not always in their entirety. It is also worth mentioning that COIL is one of the approaches that can nurture a VE as quoted by O’Dowd, 2018 “there are

many exciting virtual exchange initiatives underway in contexts outside of foreign language education (see, for example, the X-Culture and Collaborative Online International Learning (COIL)” (p. 2).

2.3. State of the art

2.3.1. Collaborative Online International Learning (COIL) in the Latin America context

Several research studies have covered COIL, nevertheless, the majority of them belong to European and North American countries. The main purpose of this review is to emphasize the COIL experiences that have been developed in the Latin American context in all disciplines where the scarce record and attention that inform on the trajectory of the approach is evident.

Firstly, in the Colombian context there were identified COIL studies; Aguilar-Cruz and Xiang (2023) reported the results of a collaboration between bachelor students from China and Colombia during COVID-19. The qualitative study aimed to register the participants' perceptions while using a foreign language in different scenarios with international students. The study concluded with some challenges and benefits obtained from the COIL course such as use of the language in meaningful environments, intercultural communication and long-life skills acquisition. In other words, students were exposed to a different culture where they were motivated to prepare their speech and at the same time acquire skills to behave properly during those interactions with Chinese participants. Similarly, Cipagauta (2022), coordinated a research-based educational course framed by COIL with Colombian and Peruvian undergraduate students. This study presented the effectiveness and benefits of COIL in promoting soft skills, the internationalization of the curriculum and the opportunity to participate in a virtual exchange without physical mobility. Additionally, the author pointed out that the use of the COIL approach became trendy since the pandemic. These research results were analyzed noting that, despite the

inclusion of a table with the main course descriptions, there was insufficient details to characterize a COIL course in depth.

Concerning international contexts, a study about the intercultural competence was developed. Hackett et al., (2023) sought and tested the improvement of the intercultural competence in a quasi-experimental study with undergraduates from Netherland and United States. The research revealed that the participants without international experience from the control group increased their cultural knowledge significantly. On the other hand, Gutiérrez-González et al., (2023) published a COIL experience with undergraduate and postgraduate architecture students from Peru and Spain. This case study intended to gather participants' views upon the integration of COIL and the level of global skills they acquired. The authors found that students were motivated and developed communicative skills through the virtual learning environment. It was also evident that partnership can include more than two institutions, that is the case of the study conducted by Slapac et al., (2023) where three countries: south Africa, Norway and United States worked together in two occasions to promote internationalization practices upon social justice topics.

Previous studies were carried out in Latin countries such as Mexico, Dominican Republic, Chile, Argentina, Brazil, among others. For instance, King (2020) shared her findings mentioning the diverse perspectives obtained from learners upon the COIL experience. The researcher pointed out the success in the course implemented with Mexican and US' higher education institutions which focused on cultural and educational aspects. Furthermore, Núñez et al., (2023) detailed a COIL course on self-regulated skills and students' production in an online engineer program in Mexico, Dominican Republic, and two Chilean universities. The quantitative data collected showed that this global exchange reinforced the students' academic

results and abilities to communicate with international students. Finally, Romero-Rodríguez et al., (2022) conducted a quasi-experimental research involving education teachers with university students from Spain and Mexico, showing an improvement in their creativity and teamwork skills.

2.3.2. Internationalization of the curriculum in higher education in Latin America

Internationalizing the curriculum is one of the pillars under the implementation of the COIL approach due to the collaboration between institutions and the shaping of the digital era. “Since the 1980s, and particularly in the 1990s, there have been several attempts to reform higher education in Latin America in response to the challenges posed by globalization” (Gacel-Ávila et al., 2005). However, not well structured, and solid proposal have taken place due to economic conditions. De Wit and Leask (2015) conveyed that the inequality that students face when applying to internationalizing experiences can be reduced if other institutional strategies were incorporated:

This highlights the importance of the “at home” component of internationalization, which not only looks at the outcomes, impact, and quality of internationalization, but is focused on internationalized learning outcomes for all students instead of the mobility of the minority (p. 11).

Under such invitation and need, some authors try to promote environments that embrace the internationalization component. This way, Tejada-Sanchez, and Molina-Naar (2020) conducted a study in a Colombian private university that fostered internationalization through EMI (English as Medium of Instruction), the researchers discovered that one of the main obstacles was the students’ language performance for communication and as a reflection the authors pinpointed that institutions’ support is essential. Likewise, one of the strategies used in Colombia to boost internationalization in higher education is the internationalization of the

curriculum (Marcano-Navas, 2021). The author along with Gacel-Ávila (2020) explained that to facilitate and accelerate this process it is necessary to adopt new policies and adjust the curricula in the whole Latin context.

2.3.3. Virtual exchange through COIL in Latin countries

Virtual exchange is the means of operating COIL learning environments, which means that physical mobility is not required, however, the case of Latin American countries is not entirely satisfactory. “While there are other organizations that promote VE initiatives within specific regions of Latin America, the LatAm COIL network is the first to serve the entirety of Latin America and the Caribbean” (King, 2022, p. 109). In spite of that, the author claimed that Latin American is still listed as one of the regions with the lowest participation in virtual exchanges.

A qualitative study carried out by Zilberberg and Krimphove (2022) was an opportunity to expand the perspectives and scope of virtual exchange in a Brazilian university. The study discussed that learning mediated by VC promotes global competencies in participants and subsequently supports virtual learning as a significant way to interact, cooperate and use the language in a natural manner for real discussions and conversations. In a similar light, Marijuan and Ferree (2023) focused on the language teaching field highlighting the positive results of that cooperation. The study was developed in a population that belong to United States and Argentina using both native languages. Awareness upon sociocultural topics, development of critical thinking, understanding and multicultural values were cultivated. “VE takes too much time/effort to develop” was the major challenge in three regions (Latin America, Central Asia, and East Asia) ... the main challenge was limited funding and incentives at the institutional and governmental levels” (Alami, et al., 2022, p. 66). It can be asserted that more support is required

if the goal is to improve the quality of education as well as to achieve the learners' proficiency in foreign language and intercultural skills. These studies contributed in terms of skills involved and approaches implemented in VE environments.

2.4. Conclusion

This chapter not only illustrated the research path to take, but it also guided the study objectives. Besides, it reinforced the researchers' intentions in characterizing COIL courses in the Latin American context and determine factors that might influence their implementation. Conceptions of the three main frameworks of the present study, COIL, internationalization of the curriculum and virtual exchange provided the researcher with the background to understand the current state of COIL with its main three elements in Latin countries. Thus, the literature review revealed several COIL cases developed worldwide and authors related to the phenomenon of study, in the national context, and some of them in the target context. Besides, it was demonstrated that COIL can be embraced in different fields of knowledge, especially in higher education.

Along this review it was identified that the collaborative parties expressed part of the challenges and drawbacks of the COIL approach specifying that the lack of professional training hindered the use of COIL. In the case of internationalization of the curriculum it revealed that it still requires more professional efforts. Regarding virtual exchange, studies suggested that there are different approaches that can be implemented to promote it, referring to COIL as one of those. All of the above, encouraged the researcher to address the questions: *what are the characteristics of courses described as COIL? And what factors influence the implementation of COIL courses from Latin American teachers and students' perspectives?*

3. Method

3.1. Introduction

Language learning is a dynamic process that over years has captured the attention of many researchers and educators, especially concerning aspects such as the teaching approaches and methodologies that best fit the current challenges and realities of the English as a Foreign Language (EFL) learners. Nowadays, the necessity to create more suitable learning environments are directed to embrace all the different components of language learning “including the international, intercultural, and global dimensions” (Ramírez-Marín et al., 2021, p. 132) as a result of the great impact of globalization and technology. In this sense, the Collaborative Online International Learning (COIL) approach seems to offer benefits and tools that support meaningful learning experiences. Following Rubin’s (2017) insights, the initiatives of COIL experiences began with the need for communication and collaboration among participants with common research interests.

Additionally, the author presented the contributions of COIL to the EFL field, and the perspectives adopted by several stakeholders that mainly belonged to institutions of higher education. Similarly, Kučerová (2023) highlighted that the value of integrating COIL in the educational setting is mainly evidenced in the collaborative dimension. Besides, the author stated that COIL recognizes diversity as a major pillar in the classrooms that fosters the possibility to share ideas and intercultural aspects without physical mobility. Hence, COIL provides a useful learning network as evidenced in the research work of Nava-Aguirre et al., (2019) who asserted that intercultural sensitivity is enhanced by the development of collaborative activities which also engage learners in a virtual environment where they can interact, promote, and develop

other skills such as communication, cooperative learning, research skills, critical thinking, analysis, reflection, and intercultural competencies.

The study followed a qualitative and exploratory research design, however it also incorporated students' views in a quantitative manner to triangulate the data by comparing, validating and analyzing with the qualitative data given by the teachers regarding COIL courses. There were carried out in five phases: first, a preliminary web search that consisted of a web search of institutions from Latin America that were carrying out COIL courses in any field of knowledge. The researcher registered the name of the university, the course name, and the instructors' contact details in a word document to send a letter of invitation to participate in the research project (Appendix A); second, sending letters of invitation; third, delivery of interviews; next, application of a Likert questionnaire and finally documentary analysis using a protocol for syllabi analysis.

The purposeful sampling participants were teachers and students involved in COIL experiences. According to the invitation and the research objectives, there was participation from the educational, EFL teaching and phonoaudiology fields. The main data gathering instruments were the semi-structured interviews, questionnaires and documentary analysis implemented were validated by experts and were piloted with a similar population to make the pertinent adjustments to the instruments. To comprehend and analyze the data collected, triangulation, thematic and descriptive analysis was used to identify connections among data, create codes that lead to a standard category. Ethical considerations were taken in mind for the development of the study, thus the protocols and guidelines exposed in the Universal Declaration on Bioethics and Human Rights by the UNESCO (2005) and Universidad de la Sabana's requirements were meticulously followed, participation was voluntary, anonymous and the researcher counted with the consent

forms signed by teachers and students' participants. All data collected during this study increased the knowledge of the trajectory of COIL filling the existing gaps in the current literature on the approach by identifying the existing courses, their characteristics, and the factors that influence their success in both designing and implementing. Therefore, this paper addressed the following research questions and objectives:

3.2. Context

The present research study involved four universities from the Latin American context, two of them related to EFL learning, one in education and the other related to medical sciences. "Latin America is a region of the world that spans two continents, North America (including Central America and the Caribbean) and South America... By and large, the countries in Latin America are still considered "developing" or "emerging" nations" (Bodenheimer, 2019). A total of four COIL instructors accepted the invitation to participate in the study. Thus, the research included one institution from Argentina (*Universidad Nacional de Córdoba*), two universities from Colombia (*Universidad Católica de Manizales*); (*Universidad de la Sabana*) and one from Mexico (*Instituto Tecnológico y de Estudios Superiores de Monterrey*). Partnerships belong to United States, Israel, and Chile.

Universidad Nacional de Córdoba (UNC) is a public university located in the province of Córdoba, Argentina it is the oldest university in the country with 410 years of trajectory.

Universidad Católica de Manizales (UCM) was founded in 1954, it is a private institution located in the urban area of Manizales, Colombia the university has benefits in terms of technology it is well equipped with internet access, devices and tools. Universidad de la Sabana (Unisabana) founded in 1979 is a private university located in Chía, Colombia and Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM or Tec) is private university founded in 1943, it

receives students from different states of the country because it is the main campus; the socioeconomic context of this Mexican university is privileged it has 26 campuses around Mexico.

3.2.1. *Type of study*

The present study was framed in a qualitative, exploratory research design. According to Kumar (2011) “the main focus in qualitative research is to understand, explain, explore, discover and clarify situations, feelings, perceptions, attitudes, values, beliefs and experiences of a group of people” (p. 103). This research design fitted the objectives of the study and contributed to answering the research questions by gathering the participants’ experiences and perspectives. Creswell (2014) noted that one of the main objectives of qualitative research is to examine topics that have not been sufficiently explored by collecting information from participants that are involved with the phenomenon under study and it was precisely the aim of this project: to explore COIL in the Latin American region. Thus, this research study sought to expand the current state of knowledge of COIL from national and international lenses. Hence, this research provides an opportunity to explore and characterize COIL courses particularly in Latin America, not only examining their content description, the factors that influence the design and implementation, but also including the perspectives of both teachers and students.

3.2.2. *Participants*

The criterion of selection for the nature of this qualitative study was purposeful sampling since the selection was done with a specific purpose in mind.

The logic and power of purposeful sampling lies in selecting *formation-rich cases* for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research. (Putton, 1990, p. 169).

The researcher selected participants who could provide rich information about the phenomenon under study, in this case, people with COIL experiences. The teachers were approached through a letter of invitation sent by email; these participants were selected according to the information recorded in the preliminary web search that identified people who had conducted COIL courses. Besides, during the development of the interviews, teachers were asked to voluntarily provide the contact information of the students that were enrolled in their courses to follow the same process of invitation, socialization of the project, and signing of the informed consent.

Therefore, the participants in this qualitative and exploratory study were four professionals in charge of COIL courses that accepted via email their interests to be in the study and answered the online semi-structured interview conducted and recorded via Zoom and Teams. Additionally, the researcher applied an online Likert-scale questionnaire to four students that have participated in COIL courses. The participants profiles came as follows:

Profile of the teachers' participants

In general, the researcher looked for teachers with experience in conducting COIL courses in any field of knowledge. The average age of the teachers was 47 years old; their nationalities were Argentinian, Mexican, and Colombian. The first participant had a bachelor's degree in phonoaudiology and 12 years of professional experience, she was in charge of teaching the subjects voice education and phonation I, the only COIL course that she oriented was an invitation of the Secretary of Foreign Affairs in 2021. The second participant was an internationalization coordinator, she had a modern languages bachelor, a magister in direction with emphasis in project management, and an MBA in project management, currently she is doing her PhD in education. She has been teaching for many years since she studied at "Escuela

Normal Superior” in Colombia. She has taught several COIL courses, but specifically global and intercultural communication, and culture identity during the period 2019-2022.

The third participant was a computer assistant engineer with a master’s degree in information technology management. She has been teaching for more than 13 years orienting online courses such as learning management system and designing courses, and science for decision making as a presential course. Besides, she has conducted different COIL courses, but for the purpose of this project the emphasis was on global and comparative education as a COIL course carried out in 2022. Finally, the fourth participant had an undergraduate degree in nutrition and dietetics, two master’s degrees in education, one in curriculum and the other in teaching practice. She had 40 years of professional experience. Currently, she is the director of programs and specializations in the faculty of education, but she also orients the subjects reflecting teaching and learning context and classroom-based evaluation, international education, and specific didactics. During the specific didactics course, she followed the COIL approach with undergraduate students in 2022.

Profile of the students’ participants

A total of four students participated in the research study by answering the questionnaire provided through Google Forms, their average age was 23 years old. Their nationalities were Argentinean and Colombian. All of them were university students, but only one of the students was experiencing COIL for the second time, and only one of them belonged to a public university. The timeframe for attending the course varied from nights, mornings, midnight, and evenings. Moreover, the platforms that the students used for independent work with their classmates were Zoom, Meet, WhatsApp and others unspecified by them.

3.2.3. *Researcher's role*

The researcher played a non-participant observer role since she was merely in charge of gathering and analyzing the data in an objective manner without being enrolled or interfering with the subject of the investigation (Sutton & Austin, 2015). The activities developed by the researcher involved the preliminary stage in which she did a web search to identify COIL initiatives and subsequently to contact the possible participants of the study. Furthermore, she was in charge of adjusting the semi-structured interview and the questionnaire provided by the director of the project, the design of the protocol for the documentary analysis, the data collection instruments' validation, piloting, implementation, and the collection and analysis of the gathered raw data. Similarly, the researcher guaranteed that all ethical behaviors were fulfilled and strictly accomplished.

3.2.4. *Ethical considerations*

The procedures followed in this study complied with all the ethical considerations mentioned in the Universal Declaration on Bioethics and Human Rights by the UNESCO (2005) and the ethical guidelines for researchers required and provided by the research professor at Universidad de La Sabana. Accordingly, the present study counted with the participants' approval including a consent form signed by the teachers and students' participants. The contribution of teachers and students in this project was vital to achieve the objectives and answer the research questions.

Besides, the present study followed the corresponding ethical parameters and behavior pointed out in studies involving human subjects that is why the researcher assured the anonymity of participants' identities, confidentiality with the information, documents, and responses provided, and voluntary state to participate with the opportunity to withdraw at any time by

informing the researcher at any stage of the project. Participants were informed about the purposes, stages, and benefits of the research study, highlighting that the project did not represent any risk to their physical, intellectual, and emotional integrity. A copy of the consent forms was included in this document (Appendix B).

3.3. Data collection instruments

The data collection instruments used in the present study were an online semi-structured interview followed by a documentary analysis, and finally an online Likert-scale questionnaire. Considering data collection as a required process in research (Pozzo et al., 2019), the purpose of the chosen instruments was to gather a right amount of general and specific data by including variables and a specific objective per each formulated question. Approaching the Latin American institutions that have implemented COIL courses and interacting with the teachers to gain a clear background on COIL classrooms and the horizons of the approach as well as the students' perspectives and experiences within the COIL environment.

3.3.1. Descriptions and justifications

Semi-structured interview

As part of this qualitative investigation, an interview was applied in the first stage of the research study. Alamri (2019) claims that semi-structured interviews are flexible instruments that allow the researcher to exclude questions or spread particular information when needed. Consequently, a semi-structured interview was delivered to a sample of four COIL instructors from Argentina, Mexico, and Colombia to collect specific data concerning their COIL experiences. Considering the context of the research, this instrument was implemented online using Zoom and Teams, all the interviews were recorded with the participants' approval for further transcription and analysis. The semi-structured interview was divided into three sections

the first to collect the profile of the professionals, the second to characterize the COIL courses and the last one to gather information regarding seven variables: training and professional development, intercultural competence, use of technology, partnership, program design, evaluation and expected students' outcomes. The last section of the interview comprised 20 guiding questions (Appendix C).

The development of the semi-structured interviews was essential for success of the whole project since during the interview it was possible to obtain the teachers' permission to receive the planning documents or syllabi designed for the COIL courses as well as the contact information (emails) of the students that have been part of the courses.

Documentary analysis

According to Bowen (2009), "documents may be the most effective means of gathering data when events can no longer be observed" (p. 31). Besides, the author pointed out that the analysis of documents in any format requires a process of evaluation and interpretation. Considering the formulated research questions, the analysis was conducted with the four online COIL syllabi shared by the instructors in PDF and Word format. The planning was designed for courses that were fully developed and taught under the COIL approach. The protocol format was divided into four columns: *categories for analysis*, *yes/no*, and *comments by the analyst*. Along with the literature review, it was possible for the observer to analyze the syllabi having as a reference eighteen items: stages, delivery mode, collaborating institutions, name of the course, objectives, topics, activities, type of communication (synchronous or asynchronous), guidelines, feedback, evaluation, interaction among students, expected outcomes, intercultural component, chronogram, distribution of responsibilities, class materials and technology/resources. (Appendix D).

Given that the four teachers involved in the study had already developed their COIL courses, the four syllabi were a tool to review the complete COIL project. In addition, it helped the researcher to get closer to the structure of the course, contrast and compare with the previous reviewed literature upon the topic, the interviews' transcription, and the other planning documents.

Questionnaire

A Likert-scale questionnaire follows a numerical component to quantify the respondents' answers; from the levels of measurement (nominal, ordinal, interval, and ratio) the analysis can be developed through statistics (Bishop & Herron, 2015). This instrument was applied to identify the students' profile and their perceptions of the COIL experience in terms of key components of the approach, personal growth, acquisition of knowledge, development of intercultural skills, communication, interaction, and collaborative skills. The questionnaire had 14 questions based on a five-point Likert scale from the highest to the lowest level: *strongly agree*, *agree*, *neutral*, *disagree*, and *strongly disagree*. It was delivered through Google Forms (Appendix E).

The raw ordinal data was exported in an excel sheet for further statistical analysis. The value of this instrument was not only in determining the opinions of the students' participants, but also including a portion of quantitative data to the study to enrich the strands of data.

3.3.2. Validation and piloting

In order to validate the data collection instruments and to avoid research bias, it was necessary to follow a rigorous process of expert validation. Thus, all instruments received three series of revision by one of the professors of the master's program expert in research procedures and with EFL knowledge. The expert revised and evaluated the instruments aiming to improve and refine them. The main adjustments made were the incorporation of the research questions

and objectives in every template, the inclusion of the variable to be measured with literature support and a column with the objective for each formulated question. Also, it was necessary to evaluate that the questions were mutually exclusive.

The piloting was carried out with participants who had similar profiles, an English teacher aware of the COIL approach, an EFL student with COIL experiences, and the protocol was completed with an online COIL syllabus. Some inaccuracies emerged from this process regarding the designer's use of metalanguage for EFL students, in the interview some questions led to the collection of similar data, redundancies, and misunderstanding. Therefore, all instruments were adjusted accordingly.

3.4. Data management procedures

The preliminary web search was delivered for two weeks, during that time the researcher read several articles and reviewed different institutional websites to obtain any information about current or previous COIL courses, a total of 24 cases were identified and registered in a Word document with the available email addresses of some of the cooperating teachers (Appendix A). Subsequently, the researcher took 3 more weeks to send the letters of invitation to the possible teachers' participants, schedule, and deliver the corresponding meeting to develop the interviews. All the interviews were recorded and then transcribed in a word document for analysis.

On the other hand, for students it was also necessary to send a letter of invitation attached to the consent form. The questionnaire was sent only to the students that accepted the call to participate. As it was designed in Google Forms, the researcher received all the responses automatically. Later, the responses were exported to an Excel sheet to follow a process of descriptive statistical analysis. With the collected syllabi, the researcher conducted a review and evaluation process using the designed protocol, comments were written according to the items

included in the protocol when pertinent. At the end, both the transcriptions of the interviews and the protocol for documentary analysis were assigned analytic notes for further interpretation and thorough analysis.

3.4.1. Validation

In order to validate the data gathered in this qualitative study and to accomplish the validity and reliability as key concepts in research, three sources of information were designed to nurture, compare, and confront datasets. As stated by Van der Loo and de Jonge (2020) data validation is of great importance to ensure data quality and to verify its accuracy to answer the formulated research questions in the study. Thus, data triangulation contributed to the previous purposes by merging the data. “Triangulation constructs several appendages, namely theoretical or methodological perspectives, several views or several readings, diverse points of view to address the same research problem” (Arias, 2022, p. 4). That is why apart from the qualitative data, the study also received the support of a quantitative intake. Hence, it was possible to compare, make connections, and interpret information collected from the interviews, documentary analysis and questionnaire, as well as it consolidated the teachers and students’ perspectives which will be presented in the finding section.

3.4.2. Data analysis methodology

The data analysis took several sequential phases of revision, interpretation and understanding. The frameworks and techniques followed for the analysis of the entire data were deductive thematic analysis and descriptive statistical analysis. On one hand, thematic analysis drives the researcher to identify patterns in data, Dawadi (2020) affirmed that “thematic analysis is a qualitative research method that researchers use to systematically organize and analyze complex data sets. It is a search for themes that can capture the narratives available in the

account of data sets” (p. 62). For this it was ideal to use some analytic tools such as questioning to be constantly looking for comparisons and understanding meanings. On the other hand, for the data collected in the Likert-scale questionnaire, it was used the descriptive statistics which according to Sloman (2010) “descriptive analyses identify events that are correlated with the occurrence of some target response” (p. 20). Given this, the researcher did not interfere or control the participants’ responses.

This data analysis procedure was developed in several phases having as reference a coding process. The first step comprised the researcher getting familiar with the data for creating the initial analytic notes or written memos. “The roles of open, axial, and selective coding are critical to achieving the research goals of a study, as they provide opportunities for researchers to immerse themselves in the data” (Williams & Moser, 2019. p. 54). Then, the open, axial, and selective coding helped the researcher to label and obtain a bank of codes for further examination and integration. Finally, with the last stage of coding it was feasible to map the main categories by linking convergencies and finding divergencies in the derived codes.

3.5. Conclusion

In a nutshell, the development of the method chapter benefited the foundation of the present research study leading to answering the proposed research questions and the achievement of the research objectives. For instance, the validation process along with the piloting enhanced the quality of the data collection instruments, the application and the data management. Since the first time the researcher was exposed to raw data, a continuous process of breaking and drawing connections was carried out. Moreover, the data analysis methodology permitted systematic coding by reducing, simplifying, and linking the information. Besides, every stage taken, technique and procedure followed to collect, analyze, and understand the data aimed to

characterize COIL courses in the Latin America context, and determine the factors that might influence the design and implementation of COIL courses from both teachers and students' perspectives.

4. Results

4.1. Introduction

This qualitative-exploratory research study investigated the characteristics of courses described as COIL in Latin America and the factors that influence the implementation of COIL courses from Latin American teachers and students' perspectives. The study was designed and completed using a web search to gain information around COIL cases from the Latin American context. The data gathered in this preliminary stage served to register the institutions that were doing or had done COIL to contact the instructors and, in that way, characterize every course in detail. Besides, a semi-structured interview based on seven main variables was implemented with four COIL instructors from Colombia, Mexico, and Argentina. As a third stage, a total of four syllabi were analyzed with a protocol focusing on eighteen specific categories. Finally, a Likert-scale questionnaire was applied to four students who participated in those COIL courses.

This section focuses on the findings that emerged from the data analysis process. To integrate, confront and compare the raw data obtained in the interviews, documentary analysis, and questionnaire, the researcher used the thematic analysis through the coding approach having memos as a tool to identify commonalities and discrepancies in data. Thus, final codes become evident and from this the researcher derived the main categories that answered the proposed research questions.

4.2. Categories

During the coding process it was possible to compare, make connections and interpret the data from three sources of information. The coding process of the data collection instruments labeled as recorded interviews (RI), documentary analysis (DA), and virtual questionnaire (VQ) was initially obtained considering the two main research questions. RQ1 aimed to characterize COIL courses, and RQ2 oriented to determine the factors that might influence in the design and implementation of COIL cases as follows:

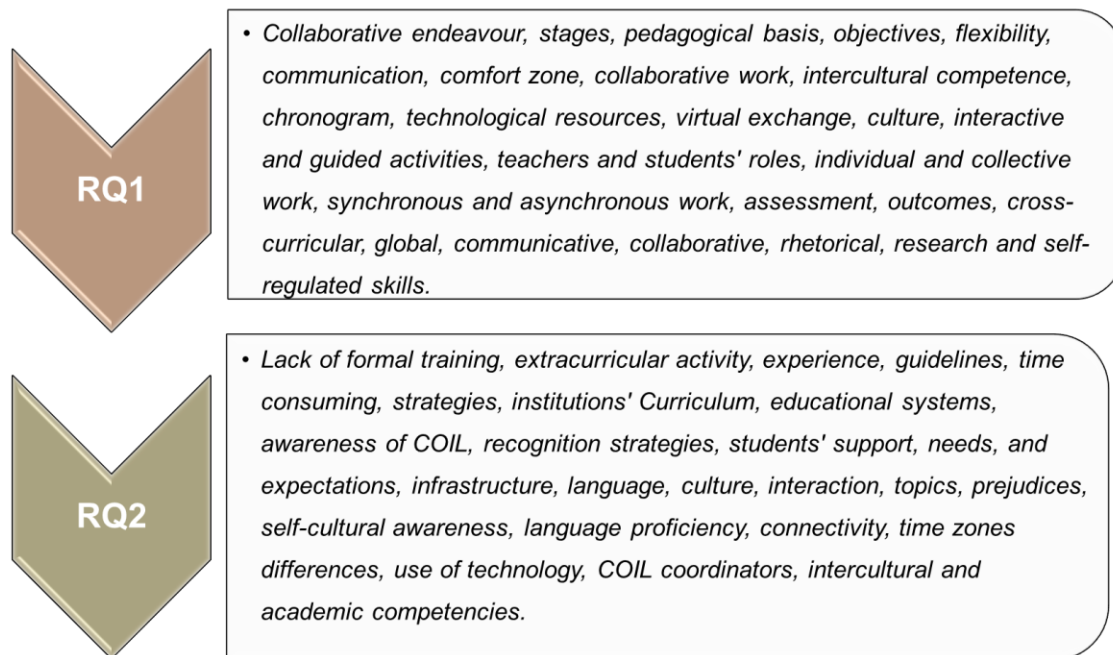


Figure 1. Preliminary codes from the RI, DA and VQ

4.2.1. Overall category mapping

The preliminary codes allowed the researcher to reduce the data, for this, it was pertinent to comprise and match key and repetitive words. Subsequently, the final codes along with the

written memos generated three major categories: (a) Collaborative Online International Learning embraces three main phases of development (b) collaboration and cross-curricular skills are cornerstones in COIL (c) essentials to design, implement and participate in COIL courses.

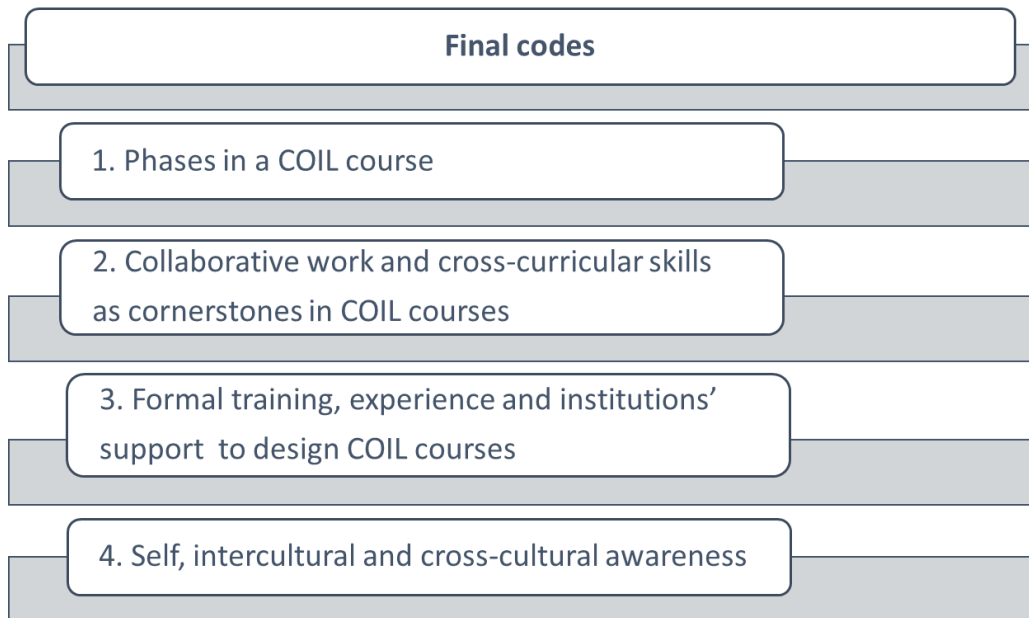


Figure 2. Final codes from the memoing process

4.2.2. Discussion of categories

COIL embraces three main phases of development

This first category was the result of interviews and syllabi analysis where respondents agreed on the sequence of different phases for the development of a COIL course. This finding was aligned with the structure published in the website *SUNY COIL center* which stated that COIL follows a progression of four modules, however, the interviewees in this study discussed

only three phases of development for COIL courses. Figure 3 compared and contrasted both COIL courses stages:

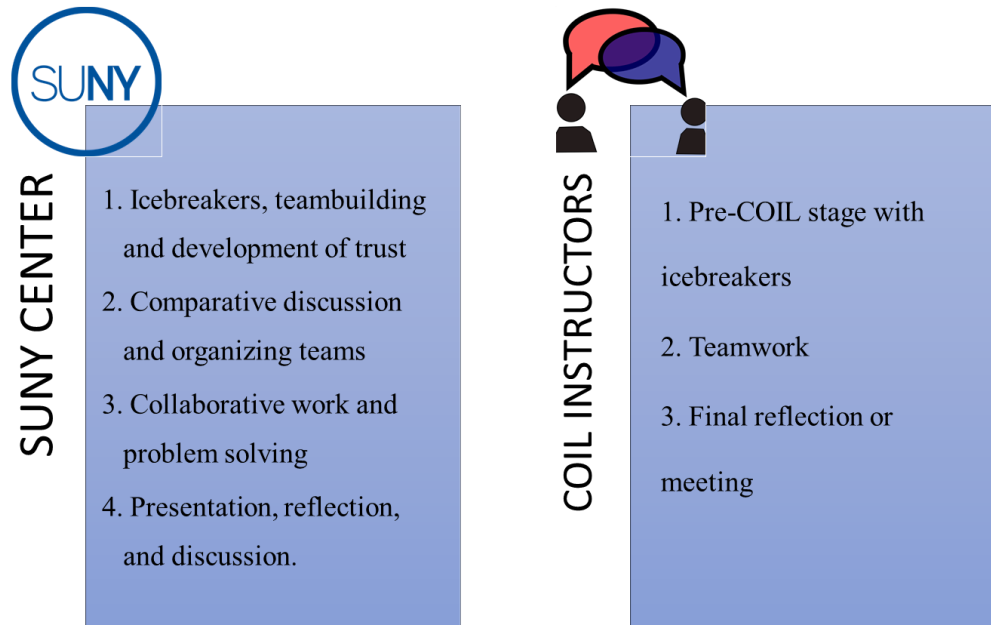


Figure 3. Comparison between the modules suggested by the *SUNY COIL center* and the stages mentioned by the teachers' participants.

Nonetheless, it is important to clarify that although not all the instructors assigned the same name to the stages, they were very similar, and in the end the purpose was the same. In the case of interviews, the variable devoted to professional development gathered teachers' opinions regarding their training and the influence of that preparation for the designing and implementation of COIL. Therefore, they stated that COIL is a structured approach that contemplates specific purposes for each stage. This statement was reflected in the transcription of the interviews, as shown in the following excerpts:

“It is that COIL is very structured, we have to follow specific parameters. For example, it was mandatory for the first meeting to have an icebreaker activity to carry out the presentation, integrate and motivate the participants” (Teacher 1, RI).

... “you need to prepare them before they start communicating with the students in a different country, we need to talk about intercultural communication, you need to have the icebreaker and you need to work on the main project and how do you need to design the project with some pedagogical basis like description and instructions for the students...” (Teacher 2, RI).

The foregoing statements provided by teachers coincide in the fact that before designing the course itself it is key to create a path which guides the students along the process; both instructors agreed with students' prior preparation to approach the other group of students by using strategies for an assertive communication considering the cultural component. In addition, despite the length of each course, which varied between two months, one year, seven and eight weeks, the characteristics mentioned by the teachers were in line with a given time allocation for COIL courses and the instructors showed that they had a structure as a main reference or starting point in mind for the development of the courses. That is to say, all teachers, based on their specific objectives and learners' objectives, designed the COILs to encompass the natural structure of the approach (*preparation, collaboration, reflection*). By this, teachers of CLIL adjusted and designed the learning activities to cover the three basic stages of CLIL.

For instance, teachers mentioned during the interviews that at the beginning, middle and end of the COIL course some of the implemented activities involved pre-sessions to talk about intercultural communication, discussions, Power Point presentations, trivia of words, introductory videos, dynamic activities to interchange points of view, and questions to promote

interaction between participants. In the middle and at the end of the COIL course, the activities were socialization of projects through pitch presentations, word clouds to summarize the experience, exit tickets, infographics, posts, charts, portfolios with reflections. More evidence was gathered as mentioned by teachers 2 and 1:

“Teachers need to design a first step to prepare the students for the collaboration and also a pre-activity to know each other, then students work on a main project, and finally a reflection. So, we considered the three parts of the COIL (icebreaker, collaborative work, and reflection)” (Teacher 2, RI).

“The first modules did not include any academic tasks; the students participated in initial activities to know each other and integrate in the group” (Teacher 1, RI).

Likewise, the documentary analysis showed that the majority of syllabi included the stages labeled under different names and using different techniques.

“They were presented in four different modules, it also included an icebreaker activity” (comments by the analyst on the syllabus provided by teacher 1, DA).

“The syllabus included icebreaker, teamwork, teamwork sharing and final reflection. All was divided in specific steps” (comments by the analyst on the syllabus provided by teacher 2, DA).

“It included pre-COIL class, meeting, and final meeting” (comments by the analyst on the syllabus provided by teacher 3, DA).

“At the end of the planning, it had a graphic with some activities to be developed in and outside the class including a specific purpose” (comments by the analyst on the syllabus provided by teacher 4, DA).

All in all, this category demonstrated the link between the information collected in interviews and documentary analysis since in both instruments it was noticeable that COIL needs to be developed in a progressive manner, especially focusing on varied activities that involve non-academic and academic purposes with a main emphasis on interaction among participants. Hence, it can be asserted that COIL embraces three main stages of development that can be adjusted depending on the topic to be covered, expected outcomes and objectives to establish the collaboration.

Collaboration and cross-curricular skills are cornerstones in COIL

The interpretation of the merged data from the interviews, documentary analysis and questionnaire evoked two main concepts as cornerstones in the COIL approach. The first one has to do with collaboration not only between teachers as designers and facilitators, but also among students as active and collaborating agents. As stated by Naicker et al., (2022) “COIL provides additional learning experiences where students can interact, collaborate, and take ownership of their learning, extending opportunities for intercultural and transnational learning” (p. 499). Therefore, this category contains a valuable finding that indicates the principal characteristics and advantages of incorporating COIL in the institutions’ curriculum, as indicated by the teachers, COIL is a rewarding teaching and learning experience.

“The idea was not to divide the work but truly collaborate, sometimes as an observer but you will be there” (Teacher 2: RI).

The previous excerpt indicates that institutions interested in applying COIL should find an excuse and ideate the learning scenarios to provide the participants with the necessary strategies, tools, and teachers’ support to be part and succeed in a COIL journey. In the same line, during the documentary analysis the observer found that the activities enclosed in the planning, the intercultural component, the type of interaction and expected students’ outcomes fostered cross-curricular skills and encouraged the acquisitions of competencies such as *soft skills, intercultural communication, cultural awareness, flexibility, identity, self-regulated skills, assertive communication, teamwork, open mindedness, pluralism, and global skills*. The cross-curricular skills were also strengthened by the use of technology, which is now considered as a third culture.

“With this particular subject, this cultural subject we have all the topics open like a possibility be talking about things that are happening right now, particularly about technology and how technology is turning into a third culture and how responsible we are for that” (Teacher 4; RI).

For instance, the activities involved in the COIL courses integrated projects that students developed progressively during synchronous and asynchronous work, discussions and comparisons upon cultural topics, stereotypes, and educational systems, problem solving, and collective analysis. As a result, the assessment process followed in the activities and final students’ outcomes varied since when it comes to opinions and culture it is not pertinent just to assign a number. For this reason, the main type of evaluation involved in the COIL approach was formative or qualitative assessment proving constant feedback, the most important items were

understanding, reflection and discussions; some teachers used rubrics, peer assessment and others a point system.

Besides, the enhancement of cross-cultural skills was highlighted by students in the questionnaire, in question 11 students responded between the highest scales as below:

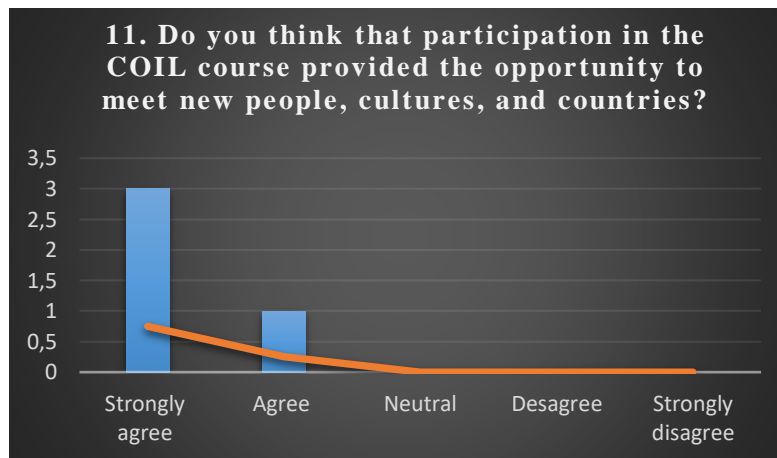


Figure 4. Scale of the students' responses concerning question 11 in the VQ: strongly agree (5) agree (4) neutral (3) disagree (2) strongly disagree (1).

The previous clustered chart showed that the three of the students strongly agreed and one agreed with the incorporation of the intercultural component in the COIL classes. Together with the analysis of the syllabi the data exemplified that COIL is an approach that can be used to deal with several disciplines and at the same time promote the participation of all the students to complete with a specific assignment, task, or project. From figure 4 and teachers' comments, the interpretation is that cultures provided scenarios to connect and understand others, in this case the virtual exchange mediated by COIL contributed to build teamwork, development of

empathetic links and the use of careful language both to ask and to provide answers, and most of all the cultural and identity appropriation itself.

“Everyone will be collaborating and not just contributing” (Teacher 2: RI)

Essentials to design, implement and participate in COIL courses

This last category evinces the answers provided in the interviews and the responses given in the questionnaire that used the Likert scale. Teachers emphasized fundamentals that supported and hindered the design, implementation, and participation of COIL courses. Nevertheless, there was a relevant comment made by one of the teachers that encourages and demonstrates how COIL can be considered a teaching trend in any field, in the case of the present study the cases discussed were education, English teaching and phonoaudiology.

“I think that right now in Latin America there is also like awareness of the importance of these types of activities and how these activities also help us to connect among us in Latin America and also with the rest of the world” (Teacher 4, RI).

On the one hand, collectively, teachers exposed essential factors that were advantages and disadvantages. Firstly, participants mentioned that the institutions’ curriculum played an important role in establishing a partnership with other institutions. Given that the teachers involved need to agree, analyze, evaluate, and decide together with a common purpose in mind without ignoring the reality and needs of their group of students, thereby the purpose will be to integrate, complement or design a planning that covers both contexts.

“Another challenge was the planning process that took too much time in advance to organize common objectives considering the differences in both educational systems and the structure of the programs in the universities involved” (Teacher 1, RI).

A common and recurrent answer was that none of the interviewed teachers have received any formal training on COIL. On the contrary, they have learned how COIL works along the way and as a result of the collaboration itself with their partners that is why teachers highlighted a huge influence on establishing partnership. Because of that necessity, some of them have designed a training course for COIL.

“The one that I designed; I was in charge of designing the COIL training that all professors receive... I also started working and learning from the experience from other colleagues based on the needs at faculty” (Teacher, 2, RI).

“Basically, the training has been on the job, my partner has actual training for this so, the professor trained me how she has done it” (Teacher 3, RI).

Time constraints related to time zones were the most predominant obstacle to developing COIL. Teachers pointed out that it was complex to balance a neutral point to meet as exposed in the following excerpt:

...”it also depended on Israel’s calendar because they do not work with the solar calendar, their years move around the moon cycle, their months were completely in between our months” (Teacher 4, RI).

Similarly, teachers were concerned about the time devoted to meeting, planning, and designing the COIL course. Thus, they claimed about the role of the curriculum to connect and collaborate, and the importance and benefits in having a COIL coordinator and. Especially, someone who supports and interferes regarding technical and logistical matters as well as to communicate any relevant information to the responsible department. As a whole, teachers with COIL initiatives need the institutions' support to incorporate COIL practices in the curriculum since in some cases COIL was delivered as an extracurricular activity. The excerpts below show first the influence of the curriculum and then the teachers' opinions upon institutions' support:

“Huge. Only one person is not able to do like an internationalization of the curriculum. I think it is about an institutional strategy” (Teacher 4, RI).

“I think they need to recognize the amount of time that collaborative planning takes, this is planning together, agreeing on things” (Teacher 3, RI).

“I did not receive any formal training it was just an invitation to Secretary of Foreign Affairs as an extracurricular activity” (Teacher 1, RI).

“I think the first thing will be to have at least a person in charge of coordinating all the collaboration even if they have two, three collaborations happening, there must be someone that professors can identify as support or someone to contact in case they have questions or they need help with something” (Teacher 2, RI).

On the other hand, figure 4 shows the distribution in the students' responses for questions 10 in the provided questionnaire. It suggests that the number of hours devoted to collaborative learning in which they participated might not be sufficient. This can be the result of the difficulty

presented by some of the students, that considering their time zones, were not able to attend to most of the scheduled meetings.

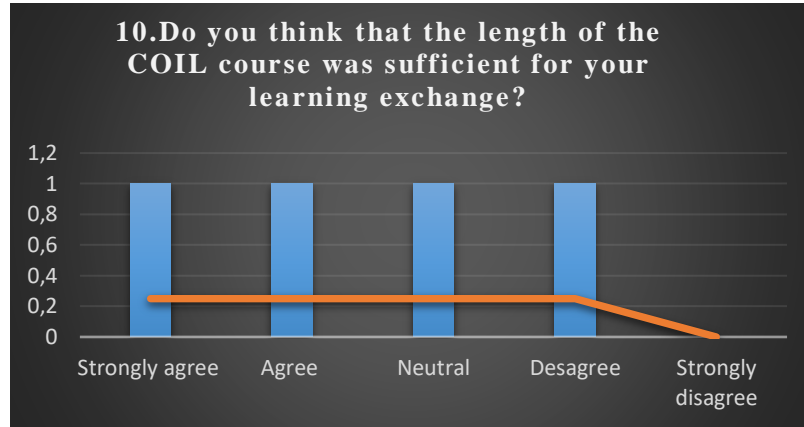


Figure 5. Percentage of the students' responses concerning question 11 in the VQ: *strongly agree* (5) *agree* (4) *neutral* (3) *disagree* (2) *strongly disagree* (1).

Lastly, table 1 contains the average from question 1 to 14 considering the four students' participants. Based on the results obtained it is noticed that the lowest value lies in questions 10 and 13 which aimed to know their perceptions about the length of the course and the use of the virtual platforms. The platforms implemented for the development of the COIL courses included: *Meet, Mentimeter, Kahoot, Jamboard, Whatsapp, Moodle Platforms (LMS), google Drive, Zoom, Padlet, Genially, Glogster, Slack, Email*, and for independent work others that depend on the creativity and convenience of students. Regarding the highest values it found questions 1, 3, 5, 8, 9, 11, 12 and 14 which basically embraced the use of COIL in the learning processes, the incorporation of the intercultural component, the quality of communication with instructors and peers, and the motivation factor demonstrated in the COIL sessions.

QUESTIONS													
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
5	3	4	3	4	4	4	4	5	3	5	5	4	4
4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	4	5	5	4	5	4	5	5	5	3	5
4	4	5	3	4	3	4	4	4	2	5	4	3	4
4.5	4	4.5	3.5	4.25	4	4	4.25	4.25	3.5	4.75	4.5	3.5	4.25

Table 1. Average of the students’ responses in the VQ

Even though, the analysis of the data did not lead to a core category, it is worth mentioning that the emerged categories were interconnected, and there were not evident discrepancies among the data collected, on the contrary every instrument enriched and supported the findings. Moreover, teachers and students’ responses were similar. Figure 6 shows all the students’ responses revealing that their experiences with the COIL approach were to their liking as the positive comments made by the teachers in the excerpts provided along this study.

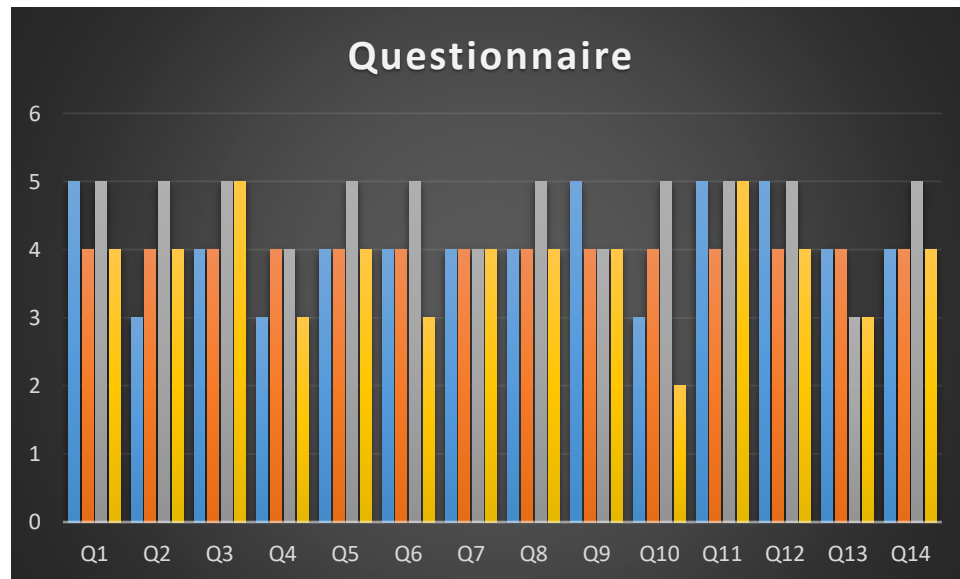


Figure 6. Students’ responses in the VQ

In terms of technology as referred by teachers they were privileged to have technological resources and facilities that enable the implementation of this approach; however, the same result or response could not be expected from other less privileged contexts in terms of network access and availability of suitable equipment to carry out the collaborative virtual exchange. Also, it is important to mention the roles played by teachers and students in a COIL environment since both are collaborators. Firstly, teachers are autonomous designers and the support for students, also referred to as “strategic mind” (Teacher 4, RI), they are professional coaches with active participation and flexibility. Secondly, students are active participants and autonomous in their learning, sometimes they can be ambassadors and leaders.

A teacher stated that:

“If I were a teacher this semester certainly, I will be applying COIL without any hesitation to me it has great value it adds real elements to the class” (Teacher 4, RI).

4.3. Conclusion

All data collected during this study increased the knowledge of the trajectory of COIL filling the existing gaps in the current literature on the approach by identifying the existing courses, their characteristics, and the factors that affect their success in the Latin American context. Thus, from the interpretation and reflection of the data gathered from teachers and students’ participants in COIL experiences it was possible to identify the specific features of COIL courses by examining the structure of their lessons which relies on three main phases of development (icebreaker, teamwork, and reflection), additionally the data revealed that COIL embraces collaboration as a cornerstone and promotes cross-curricular skills as essentials for the approach during the three progressive stages. Last but not least, the four designed courses by the participants teachers of the study had in common a name, a brief description, objectives, topics,

and content within their syllabi and based on that it was possible to characterize the COIL courses in detail.

Besides, it was possible to determine the factors that influence the design and implementation of COIL. As exposed in the findings, time zones differences, institutions' support, use of technology and program design are key concepts to be considered. Training is necessary, but it is not an obstacle to implementing COIL since thanks to the partnership it is possible to cooperate and have a collaborative planning and teaching. This notwithstanding, training is not enough, teachers need to be prepared to learn from experience including new but accessible tools, sharing, and socializing with students' communicative strategies, and providing both academic and technical support, it is important that participants of a COIL course feel secure and trust each other.

As pointed out by the participants, one of the major challenges was the quality of communication with their partners to decide and agree on together. Furthermore, from these Latin American countries (Argentina, Mexico, and Colombia) it was found that there is a network that promotes and encourages COIL initiatives, the *Latin American COIL network*, it means that COIL is being implemented in the Latin American context, but not much emphasis has been given to investigate in detail its dynamics and scope.

5. Discussion

5.1. Introduction

Integrating approaches that stimulate not only the learning of a second language but also expose students to scenarios where they can interact with foreign peers is currently an advantage and alternative that enhance the acquisition of other skills to face the real and digital world. Consequently, the implementation of COIL facilitates the development of intercultural competencies by allowing the approach to a new culture, obtain digital literacy skills and become a citizen of the world (Nishio, 2023). The data collected in this research contributed to the state of COIL in the Latin American context by describing in detail the courses and exposing the factors that are linked to the success or failure of COIL based on the experiences of teachers and students who participated in these learning environments. The results of this qualitative and exploratory study encountered the cornerstones of the COIL highlighting several contributions of the approach for content and interdisciplinary learning.

The consequences of the covid pandemic and technological progress call for attention to be more open minded, innovate the teaching practice, and being resourceful to face any change in education as well as it placed empathy towards other cultures and assertive communication as key in a learning process. (Petrova et al., 2022; Van den Berg & Verster, 2022). This study covered four courses in institutions of higher education from Mexico, Colombia and Argentina and counted with the participation of four COIL instructors and four students that attended the mentioned courses. Taking into account the information presented in this paper, teachers interested in applying the COIL approach will be able to have a guide with the fundamentals for doing so. Thus, they will be informed about different networks that promote and support COIL initiatives in Latin America countries, be aware of the benefits and outcomes from designing

COIL environments, identify facilitators and barriers to use COIL, find relevant and updated literature and authors related to the approach.

5.2. Comparison of results with previous studies' results

Regarding the three main framework of this proposal, COIL, internationalization of the curriculum and virtual exchange the obtained findings can be contrasted with the previous national and international research studies presented in the literature review. Noting in the following paragraphs that those studies only reported the outcomes of COIL in different settings with no reference to the dynamic, guidelines, or fundamentals to design a COIL course. From related published works and the present study, the researcher was informed that COIL is essentially implemented in higher education and private institutions. Therefore, all studies included undergraduate students from different disciplines. In this way, COIL is not associated as an EFL teaching and learning approach, on the contrary it can be applied to various fields of knowledge as shown in Slapac et al., (2023) and Gutiérrez-González et al., (2023) that used COIL in engineering lessons and to cover social justice topics. These previous studies' results are consistent with those reported by teachers in Argentina and Mexico who taught COIL in phonoaudiology and comparative education courses.

Besides, the adoption of the COIL approach was taken as an alternative to respond to the pandemic scenario that occurred in 2019 and based on the results, COIL spread and grew across countries. As evinced in Aguilar-Cruz and Xiang's (2023) previous study and the case of Argentinian professionals who accepted the proposal made by the Secretary of Foreign Affairs to develop a COIL course. Most of the available research focused on the advantages of the COIL approach highlighting that it is a suitable way to provide students with real interactions filling the gap caused by inequalities where physical mobility is not a possibility. Likewise, teachers that

participated in this study agreed with Cipagauta (2022) affirming that COIL is a trendy approach that raise awareness upon essential and sensitive subjects such as sociocultural knowledge and values, identity, intercultural communication, collaboration, creativity, self-regulated skills, and critical thinking mediated by technology (Hacket et al., 2023; King, 2020; Romero-Rodriguez et al., 2022; Marijuan-Ferre, 2023).

Regarding the EFL context, Tejada-Sánchez and Molina-Naar (2020); Zilberberg and Krimphove (2022) asserted that interactions in the foreign language can be negative or positive, because if the proficiency in English is not well developed, it will prevent students from being active during the virtual exchange, causing less interaction and decreasing the opportunities to generate discussions, share ideas and make meaningful collaborations in the COIL environment. This, added to the few projects involving virtual exchange, the lack of funding and academic and logistical approval from institutions, places Latin America with the fewest policies and initiatives that promote and support internationalization through virtual exchange and COIL implementation (King, 2022; Alami et al., 2022).

5.3. Significance of the results

Knowing that previous research studies did not present any structure of COIL, characteristics and factors that influence its implementation, the current findings show COILs in detail and broaden the horizons of it in Latin American countries. All in all, the three major categories that answered the research questions provide key elements to understand, use and explore this type of learning environment efficiently. First, the description of the four Colombian, Mexican, and Argentinian courses pictures COIL as a structured, flexible, and scaffolded teaching approach. For instance, there is no limitation to apply it only in a specific field, nonetheless it is recommended to follow and adjust the three proposed phases

(preparation, collaboration, and reflection) according to the institutions' needs and course' objectives. This result provides directions on how to design a COIL course or how to replicate a previous study in a new context. Since this is a factor that is not contemplated in published research, it is also significant to compare those stages among courses and inspire professionals to implement it being aware of the challenges especially where it comes to choosing suitable and accessible platforms and digital tools that can be easy to use.

Second and aligned with Ramirez and Bustos-Aguirre's (2022) insights, results indicate that COIL does not fit traditional teaching methods regarding the resources, type of activities, assessment, expected students' outcomes, and topics that the COIL syllabi cover. Instead of lecturing, the roles of teachers and students vary and require the same effort from each side; the teacher is a facilitator of learning, a mentor, a guide, and supporter while a student is an ambassador, a leader, and self-regulated agent. Similarly, COIL courses are aimed at promoting academic and intercultural competencies having as its main objective the training of integral individuals and world citizens, responsible users of technology and empathetic towards differences and diverse cultures, with communication skills, the ability to identify problems in their context and propose alternatives for action. Apart from getting close to a culture, COIL intends to promote cross-curricular skills by concerning participants about the importance and contributions of technology with educational purposes, management of artificial intelligence (AI), reflection, application of knowledge to the real world, and strategies to collaborate and interact with international peers.

Finally, the study points out fundamental conditions to design, implement and participate in COIL environments. Exploring new teaching and learning environments can be challenging for some people. The last category of this research project provides guidelines for those who

intend to innovate with COIL in the classroom from the beginning to the end of the process. Moreover, the need to connect worldwide requires that updated approaches that include the digital component be incorporated as an institutional strategy in all programs and at the different educational levels. Accordingly, participants of the study stated that COIL should be more than an extracurricular activity to guarantee professional development, technical support, and spaces to meet, plan and discuss with the COIL partner. This part also suggests cultivating an assertive and constant communication with the partner institutions in order to decide the common objectives of the course and the schedule of meetings depending on the time zones and availability of both parties. These thoughts may foster the creation of spaces for discussing the topic with the institutions' principals to raise awareness about the worth of providing rewards, recognition, and assignment of COIL coordinators for the development of the proposal. Therefore, make visible the need of counting with their trust and support in both privileged and less privileged organizations in order to decentralize educational trends in this case COIL of private institutions and higher education.

5.4. Pedagogical challenges and recommendations

One of the ways to transform education processes has to do with the open-mindedness of the professionals in charge, the adoption of new decisions and the development of new ways of teaching taking advantage of this connected digital world by integrated the information technology (IT) component (Moreira et al., 2020; Legi et al., 2023). Based on the results and the ideas exposed by the participants of the current study, it is argued that the main pedagogical challenge is to incorporate COIL as an institutional strategy and innovative practice. Teachers suggested that the use of rewards for the professionals who take COIL initiatives as well as incentives for students to ensure their permanence and participation in the course. Embedding

COIL in the curriculum comprises subprocesses that need to be socialized, discussed, evaluated, and approved by the responsible team (Gwenna Moss Centre for Teaching and Learning, 2022).

There are three subprocesses; the first one is related with the institutions' availability of suitable technological infrastructure, COIL is primarily conducted in a virtual manner with the international peers and that interaction requires a classroom or space equipped with speed and high connectivity, computers, cameras, speakers, and a tripod. Even if teachers are interested in using COIL and the institutions require it, if there is not a suitable environment that complies with the basic facilities for its development, it will not be possible to successfully implement it.

Second, the selection of IT tools needs to be discussed with the COIL partner and should include a platform with a user-friendly interface; is not about using the most complex and eye-catching digital tools, but to include the ones with features that allow working synchronous and asynchronously, edit and share documents in a simple way. This type of study will also sensitize educational institutions to understand that intercultural competencies are as valuable as academic ones and that the support of principals is essential for success. The last subprocess is related to the writing of measurable, realistic, and reachable course objectives. This way, the negotiated planning or syllabi with the partner university should contemplate the individual and grouped target population's needs and realities in terms of setting, values, and other sociocultural aspects. Besides, the type of interaction (online or hybrid) need to be found in the COIL planning. From teachers' experiences it is recommended to provide ample scenarios only for students' interaction integrating the cultural component within the class activities proposed.

From the results of this study, assigning a qualified person with actual background of how the COIL approach works seems to be pertinent to organize and coordinate all the previous steps, apply for funding, guide and train new professionals in the COIL journey and be there to

mediate if necessary or provide support with the lack of any resource, failure or change that may occur, whether sporadic or anticipated. It is also vital to design a space where students can have permanent and free access to the class recordings since due to the time zone differences the project cannot be attended equally by all COIL students. Finally, connecting one classroom with one or more that is geographical apart calls for organization to coordinate the arrangement of synchronous meetings, the socialization of the course structure (stages) and requirements, expected participants' outcomes, resources, as well as empowering students with strategies and skills for communication, use of technology, collaboration, and self-regulated learning. Thereby, exposing students to a global and multicultural learning environment is a challenging but not unfeasible initiative that needs willingness, effort and flexibility by the compromised teachers and institutions.

5.5. Research limitations on the present study

Apart from the contributions and scope of this study there were a number of limitations. the researcher had difficulties using Zoom with some international participants, as without a license the meeting was interrupted to carry out the interviews. This caused discomfort and led to taking more time in the development of the online interview, nonetheless, this stage was completed successfully. Another limitation had to do with the characteristics of the sampling in terms of nationalities, level of education and the type of institution. Therefore, the study counted only with the participation of a public university, and three private institutions and all of them related to higher education level. There was not participation or previous studies that involved other levels of education at schools. Regarding the countries, the participants were Argentinian, Mexican, and Colombian, it would have been more enriching to have a more diverse sample of

Latin American countries implementing COIL to map a global and at the same time a more detailed picture of the use of the approach in that specific context.

Similarly, the sample size of teachers and students was somehow small since looking for the potential participants through a web search took a long time and only four professionals accepted. Of those participants only two were immersed in EFL environments, thus more exploration in this area was missing. Lastly, bearing in mind that the COIL courses selected were developed previously, it was necessary to use documentary analysis instead of observations. Likewise, limited access to data related to students' participants was evidenced. All the information received by professors was institutional e-mails, and the majority of the students never replied. At the end, only four students replied to the research invitation: three Colombians and one Argentinian. Again, it was noticed the lack of participation of more countries, at least one for each institution. All in all, the selection of participants, time constraints, sample size and characteristics of participants were the predominant limitations of this study, however they did not hinder the achievement of the research objectives.

5.6. Further research

There are definitely more cornerstones that need to be explored under the COIL approach. Further research could be directed to discover and record COIL cases in the Colombian context. Throughout this study it was revealed that Colombia is a participant and COIL promoter. The recommendation would be to first check the websites designed to publish relevant data about COIL such as *SUNY*, *FIU*, and *LatAm COIL*. There are professionals who are innovating in their classrooms even without having any professional training on COIL; they are cooperating with other teachers, planning together, sharing experiences, and finding out suitable ways to incorporate trendy teaching approaches such as COIL (Inada, 2022). In the same line of

thought, research should be conducted regarding professional development to identify courses that train teachers in designing and implementing COIL since the findings of this study showed that none of them have received any formal training. On the other hand, as the present study only analyzed four syllabi in terms of general structure, activities included, and functions it is recommended to further investigate COIL syllabi from different institutions to compare among their programs structure and components included. Thus, it would be ideal to characterize and determine the components that influence the design of COIL courses by comparing and contrasting several programs.

Finally, emphasis could be done on the EFL context, recalling that COIL is a teaching approach nor a language approach itself and noticing that only two of the participants were related to the English language teaching field. When it comes to teaching languages and especially English as a foreign language, the intercultural component will be immersed. This opportunity emerges to inquire about the contributions of COIL to the cultural component, the learning and proficiency achieved in the language, the learning environments designed and their influence on the different language skills. Another element has to do with COILs in public institutions and the question in knowing if the approach is limited to higher education since there is a gap in literature regarding COIL in schools for primary and secondary education, it is therefore worth exploring whether it is feasible to implement this COIL pedagogy to different levels of education.

5.7. Conclusion

The journey is challenging and much remains to be discovered under the uses of this approach to learning and teaching. Collaborative Online International Learning (COIL) is a multifaceted approach that covers different fields of knowledge (Quintana-Ordorika et al., 2023).

Furthermore, COIL works as an integrated approach to develop and expose learners to a global and multicultural scenario without physical mobility. Considering the objectives and research questions of the study it could be asserted that both were achieved appropriately. The different stages, procedures and data collection instruments allowed the researcher to approach COIL networks, promoters, and initiatives. Subsequently, data that characterizes COIL courses emerged showing that they are divided into three main stages: *preparation*, *collaboration*, *reflection* aimed to develop academic and intercultural competencies which may vary in their names and the nature of the activities proposed based on the specific purposes of institutions.

Moreover, the findings revealed that in Latin America, a context little explored being this the main rationale to conduct the research, there are different institutions that are planning together on common goals under the implementation of COIL, and especially from the pandemic. This due to the alternatives taken to continue with educational processes mediated through technology while the lockdown period; emergency that raised awareness around the importance of being equipped and flexible towards learning and teaching environments and modalities. The findings also highlighted the contributions of COIL through the internationalization of the curriculum along with the challenges that its implementation generates focusing on the factors that influence the use of it in education. Therefore, professional training, partnership standards, time constraints, and institutions' support are key components to design, implement and participate in those courses.

To sum up, COIL environments are enriching spaces to learn from differences, background knowledge, and the contribution of every individual where cross-curricular skills and opportunities for students' interaction are embedded. As this study suggests, it is necessary to join efforts between professionals and institutions to consolidate and structure adequate

programs considering both sides and making emphasis on each group of students' needs and abilities. Nevertheless, recognizing COIL as a demanding and time-consuming strategy will encourage institutions' principals to reflect, pay attention and feel motivated in integrating COIL in the curricula, adapt classrooms with the required technological resources, create and deliver courses for professional training on COIL and provide additional spaces for teachers to plan on that. Thus, the angles covered in this study demonstrated that there are alternatives to promote virtual exchange and COIL is one of those possibilities especially taking advantage of the wide range of tools and resources offered by information and communication technologies (ICT) to connect with the world and train students to be and behave as global citizens.

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Appendix A: Web search

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Universidad Católica de Chile	School of nursing	Lilian Ferrer Lagunas lferrerl@uc.cl
Universidad de Burgos Mexican University La Salle Nezahualcóyotl	Bachelor's Degree in Pedagogy	Vanessa Baños Martínez vbanos@ubu.es María Eugenia Momoko Saito Quezada
Universidad UNIMINUTO Universidad Católica del Maule, Chile	N/A	Julián Cárdenas Arias Jorge Burgos Muñoz jburgos@ucm.cl Javier Iván Guerrero Escobar
Universidad Católica del Maule Universidad Don Bosco	“Assisting students with disabilities in the EFL classroom”	Sarka Balgova Andrés Cabezas acabezas@ucm.cl Magali Vizcarra Zúñiga magali.vizcarra@udb.edu.sv Gustavo Ponce gustavo.ponce@udb.edu.sv Nancy Salinas nancy.salinas@udb.edu.sv
Universidad Católica de Temuco, Chile Universidad Nacional de Córdoba, Argentina	Speech therapy	Lorena Rosset lorena.rosset@unc.edu.ar Mariel Serra mariel.serra@unc.edu.ar
Universidad de la Amazonia in Florencia, Caquetá.	Connecting classrooms between China and Colombia	M.A. Paola Julie Aguilar-Cruz paolaaguilarcruz@gmail.com 3202190828
Chandler-Gilbert Community College (CGCC) Universidad de la Sabana UW Bothell UPCH	ENG 102: First-Year Composition From the Andes to the Cascades along the Pacific Coast: Environmental issues in Peru and the Pacific Northwest	Dr. Mickey Marsee (CGCC) mickey_marsee@cgcc.edu ana.terment@unisabana.edu.co Dr. Ana María Samper (Sabana) Dr. Armando Valdes-Velasquez Dr. Úrsula Valdez uvaldez@uw.edu
Universidad Católica del Maule Universidad Carolina en Praga Universidad CEU Cardenal Herrera Universidad Austral	“Creating a safe space in the classroom – special educational needs” Project for Journalism	Manuel Monzalve Macaya UCM mmonzalve@ucm.cl José Antonio Solves Almela jsolves@uchceu.es Dr. Ethel Pis Díez
Instituto Tecnológico de Sonora Universidad Antonio Nariño Villavicencio	Management systems	Mtra. Nancy Esperanza Saray Muñoz Dr. Juan Josué Ezequiel Morales Cervantes josue.morales@itson.edu.mx Mtra. María del Carmen Zazueta Alvarado
Universidad del Rosario Universidad de Colima	Physiotherapy	Johanna Camila Casas Cortés johanna.casas@urosario.edu.co Magdalena Sánchez Urbina

		magdalena_sanchez@ucol.mx Ángel Gabriel Hilero López ahilerito@ucol.mx
Universidad del Rosario	Public international law	Dr. Ricardo Abello – Galvis ricardo.abello@urosario.edu.co
Universidad de Mendoza Universidad de Lima Universidad del Rosario Universidad Central (UCEN)	Leadership in action	Marco Tapia Mendoza Rafael Piñeros Espinosa rafael.pineros@urosario.edu.co Miguel Ángel Quijano Campos coil@javeriana.edu.co Jeremy Young jeremyyoung@javeriana.edu.co
Universidad Javeriana	Marketing for Social Change / Social Marketing	
Universidad de la Amazonia Universidad de Burgos	constructing a culture of peace	Martha Lucía Orozco Gómez María Sanz Leal msleal@ubu.es Ángel Llorente Villasante
Minuto de Dios Colombia, sede Bello Universidad Valle del Momboy, Venezuela	Social communication Organizational analysis and diagnosis	Marlon Echavarría Rodríguez Diego Alejandro Velásquez Pineda
Universidad CEU Cardenal Herrera Universidad Católica de Manizales	Administration	Merche Gimeno Sandra Yolanda Valencia Castillo https://www.linkedin.com/in/sandra-yolanda-valencia-castillo-30b084180/
Universidad de Burgos Universidad Estatal de Trujillo (Perú)	"Challenges that unite us"	Alberto San Martín Zapatero jasan@ubu.es Olga Mendoza León omendoza@unitru.edu.pe
Universidad del Rosario Universidad Americana del Cairo en Egipto	"The Psychology of War and Peace" "Psychosocial problems in Colombian contexts"	Gutiérrez-Peláez, M miguel.gutierrez@urosario.edu.co Ellis, K. kate.ellis@aucegypt.edu
La Universidad San Francisco de Quito Coastal Carolina University	Global Environmental Politics and Political Ecology	Dr. Diego Quiroga (head of the university) dquiroga@usfq.edu.ec Dr. Pamela Martin M r. Geoff Parsons Jennifer Shinaberger jshinabe@coastal.edu
Faculty from SUNY Oneonta Universidad del Valle	Language, history, and museum studies	Luis Humberto Benavidez Paz luis.benavidez@correounivalle.edu.co María Cristina Montoya MC.Montoya@oneonta.edu Elizabeth Núñez William Walker
Sao Paulo State	Teletandem	Dr. Ana Cristina Biondo Salomão

University	Language learning and cultural exchange	ana.salomao@unesp.br
Florida International University (FIU) Tecnológico de Monterrey	Global and Comparative Education	gmndez@fiu.edu

Appendix B: Consent forms

Authorization / informed consent form to participate in a research study: “COIL around Latin America.”

Dear participant,

This research study is embedded in a macro project that aims to identify the characteristics of courses described as Collaborative Online International Learning (COIL), the participants engage in, as well as to determine the factors that might affect or influence the design and implementation of COIL courses from the Latin American context.

To achieve these objectives, it will be implemented a semi-structured interview that is divided into three sections: profile of participants, course features, and seven main variables that the project focuses on. Recording of audio and video will be needed for the interview. The duration of this stage is from 30 minutes to 40 minutes. Additionally, the researcher will gather and analyze data from the development of class observations when permitted. The gathered data aims to answer the following research questions 1) What are the characteristics of courses described as COIL? 2) What factors influence the implementation of COIL courses from Latin American teachers’ perspectives? This information will contribute to broadening the scope of research in this field at both the local and global levels.

Your participation is vital to achieving the objectives of this project and your participation is completely voluntary. It means that participants can withdraw at any time by informing the researcher at any stage of the project. The researcher assures you:

- Anonymity by using fictitious names to protect identities. Only the researchers, collaborators, and supervising professors will have access to the participants’ identities and to information that can be associated with their identities.
- Strict confidentiality of the information that participants provide.
- The project does not intend to evaluate or judge your performance and professional practice.
- The results of the present study will be disseminated to all participants either via scholarly publication(s) or conference presentation(s) to verify the information provided by the participants.
- Socialization of instructions and clarifications about the project and its stages.
- This study causes no emotional, physical, or psychological damage to the people involved.

- Participants receive a signed copy of this consent form.

As a master's candidate in 4th semester, the researcher develops this study in partial fulfillment of the requirements for the degree of Master in English Language Teaching for Self-directed Learning from the School of Education at Universidad de la Sabana, Bogota-Colombia.

Signature

E-mail

Position

Date

Thank you in advance for your authorization and contribution to participate in this project.

Cordially,

NIDIA PAOLA VILLALOBOS SALINAS (Master's Candidate)
nidiavisa@unisabana.edu.co

Authorization / informed consent form to participate in a research study: "COIL around Latin America."

Dear participant,

This research study is embedded in a macro project that aims to identify the characteristics of courses described as Collaborative Online International Learning (COIL), the participants engage in, as well as to determine the factors that might affect or influence the design and implementation of COIL courses from the Latin American context.

To achieve these objectives, it will be implemented a questionnaire that lasts from 25 minutes to 30 minutes. The gathered data will contribute to broadening the scope of research in this field at both the local and global levels by identifying the students' perceptions of the COIL experience, in terms of personal growth, development of intercultural skills, communication, interaction, and collaboration with others online.

Your participation is vital to achieving the objectives of this project and your participation is completely voluntary. It means that participants can withdraw at any time by informing the researcher at any stage of the project. The researcher assures you:

- Anonymity by using fictitious names to protect identities. Only the researchers, collaborators, and supervising professors will have access to the participants' identities and to information that can be associated with their identities.
- Strict confidentiality of the information that participants provide.

- The project does not intend to evaluate or judge your academic performance and opinions.
- The results of the present study will be disseminated to all participants either via scholarly publication(s) or conference presentation(s) to verify the information provided by the participants.
- Socialization of instructions and clarifications about the project and its stages.
- This study causes no emotional, physical, or psychological damage to the people involved.
- Participants receive a signed copy of this consent form.

As a master's candidate in 3rd semester, I will develop this study in partial fulfillment of the requirements for the degree of Master in English Language Teaching for Self-directed Learning from the School of Education at Universidad de la Sabana, Bogota-Colombia.

Signature

E-mail

Nationality

Date

I thank you in advance for your authorization and contribution to participate in this project.

Cordially,

NIDIA PAOLA VILLALOBOS SALINAS (Master's Candidate)

nidiavisa@unisabana.edu.co

Appendix C: Semi-structured interview

Research questions	Research objectives
<ul style="list-style-type: none"> • What are the characteristics of courses described as COIL? • What factors influence the implementation of COIL courses from Latin American teachers' perspectives? 	<ul style="list-style-type: none"> • To identify the characteristics of courses described as COIL. • To determine the factors that might affect the design and implementation of COIL courses.

Section 1: Profile of the participants

1. What is your name?
2. How old are you?
3. What is your current education level?
4. Where are you from?
5. Where do you teach at?
6. Briefly describe your teaching context (place, region, level, area: suburban, urban, rural)
7. How long have you been a teacher?
8. How long have you been teaching at [x]?
9. What courses do you teach?
10. What COIL courses do you teach?

Section 2: COIL experiences (one table per each COIL course reported/instructor)

Course features

<i>Course name</i>	
<i>Objective of the course</i>	
<i>Description of the course</i>	
<i>Topics</i>	
<i>Resources</i>	
<i>Length</i>	
<i>COIL partner</i>	
<i>Institution/country</i>	
<i>Delivery mode</i>	
<i>Online/blended</i>	
<i>Number of students</i>	

Variable	Objective of the question	Question
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<p><u>Training or Professional Development (PD)</u></p> <p>“Given the central importance that education has in any society, teachers are expected not only to be competent but also to be professional in their related fields and subject matters. For this reason, they have to possess a great deal of knowledge and skills” (Boudersa, 2016, p. 3)</p>	<p>Find out the connection between previous training or PD on the design and implementation of COIL</p>	<ol style="list-style-type: none"> 1. What kind of training or professional development have you received on COIL? Please describe. 2. How has the training influenced the design and implementation of COIL courses? 3. What would you recommend as part of a training course for COIL?
<p><u>Intercultural Competence (IC)</u></p> <p>“The acquisition and development of intercultural competence are major desired outcomes for university students. This competence is one of the most important for college graduates to be successful in their working environments” (Sierra-Huedo & Nevado-Llopis, 2022, p. 2). The main purpose behind this concept is to provide learners with the necessary skills and knowledge to be global citizens.</p>	<p>Describe strategies teachers use to develop students’ intercultural competence</p> <p>Determine enablers of IC</p> <p>Determine obstacles of IC.</p>	<ol style="list-style-type: none"> 4. How has your experience with the IC been during the implementation of COIL? 5. What do you do to work the intercultural component in your COIL classes? 6. Please describe strategies that work best for you to develop IC 7. What have been obstacles in the development of IC?

<p><u>Use of technology</u></p> <p>“...Conventional methods of education have been deficient since technology changes the expectations and learning practices of students quickly. The efficient use of ICT is generally based on the increase of the student learning speed during the training, a cost reduction, and an effective learning process. Rapid technological advances make technological use important both for teaching and learning in foreign languages” (Kumar et al., 2022, p. 57)</p>	<p>Establish the kind of technology used in COIL</p>	<p>8. Please describe the technology that you use in COIL classes (platforms, Software, etc.)</p> <p>9. What has been easy?</p> <p>10. What has been difficult?</p>
<p><u>Partnership</u></p> <p>“International teaching experiences necessitate interaction and collaboration with host teachers and students” (Hauerwas & Creamer, 2018, p. 160). Besides, “education in the 21st century emphasizes globalization and internationalization” (Asri, 2019, p. 335). Thus, the international partnership promotes the development of collaboration between institutions around the</p>	<p>Identify the countries and institutions from Latin America that collaborate/participate in the COIL course</p>	<p>11. What aspects do you have into account to establish a partnership with another institution?</p> <p>12. What is the role of the institutions’ curriculum to connect and collaborate with other institutions?</p>

<p>world, engaging students in significant and diverse learning environments.</p>		
<p><u>Program design</u></p> <p>“Program ‘design’ is a verb describing the manner in which the policy formulation process creates a program that is sensitive to context-specific constraints. However, “design” is also a noun describing the resulting policy product that emerges from the formulation process” (Howlett et al., 2014, p. 2).</p>	<p>Determine factors/components that influence the design of COIL courses</p>	<p>13. What have been the challenges/obstacles/facilitators/common issues in designing the COIL course?</p> <p>14. What do you think institutions should do to support the design/implementation of COIL courses?</p> <p>15. What is the role of the teachers and students in a COIL class?</p> <p>16. What type of learning/teaching activities does the COIL course include?</p>

<p><u>Evaluation</u></p> <p>“Assessments are critical elements of instruction; they determine accomplishment of lesson objectives. The assessments that promote the learning process are authentic assessments. They assess their ability to apply standard-driven knowledge and skills to real-world challenges” (Asri, 2019, p. 337).</p>	<p>Point out the assessment process involved in the COIL approach</p>	<p>17. What type of evaluation or assessment do you implement for the COIL classes?</p> <p>18. What are the components/items that you consider while assessing your students’ performance and learning?</p>
<p><u>Expected students’ outcomes</u></p> <p>“Learning outcomes are statements of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning. They are explicit statements about the outcomes of learning – the results of learning. They are usually defined in terms of a mixture of knowledge, skills, abilities, attitudes and understanding that an individual will attain as a result of his or her successful engagement in a particular set of higher</p>	<p>Examine/specify the type of outcomes that students deliver/develop under the COIL approach</p>	<p>19. What tasks/assignments/activities do the students develop during the COIL experience and what final products should be delivered?</p> <p>20. What are the expected competencies students will gain in a COIL environment?</p>

<p>education experiences” (Adam, p.2)</p> <p>Similarly, Zhang (2017) claims that “the broad definition of Students Learning Outcomes (SLOs) generally refers to the outcomes of “product” and achievements resulting from Higher Education (HE) investments and activities” (p. 4).</p>		
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Appendix D: protocol for documentary analysis

Research questions	Research objectives
<ul style="list-style-type: none"> • What are the characteristics of courses described as COIL? • What factors influence the implementation of COIL courses from Latin American teachers’ perspectives? 	<ul style="list-style-type: none"> • To identify the characteristics of courses described as COIL. • To determine the factors that might affect the design and implementation of COIL courses.

Instructor	
Institution	
Analyst	
Partnerships	
Date	

Categories for analysis	Yes	No	Comments by the analyst
The planning shows the different <i>stages/phases</i>			

The planning has the <i>delivery mode</i> of the COIL course			
The document indicates the names of the <i>collaborating institutions</i>			
The document indicates the name of the <i>COIL course</i>			
The project designed includes the <i>objectives</i> of the COIL course			
<i>Topics/content</i> is clearly exemplified in the document			
<i>Activities/tasks</i> are enclosed in the planning, and they are varied			
The planning considers both <i>synchronous and asynchronous</i> meetings			
COIL instructors socialize clear <i>guidelines</i> to the students for the development of the course			
<i>Feedback</i> is included in the planning			
<i>Evaluation</i> components/items are given in the planning			
It contains activities that promote <i>interaction</i> among students			
The planning shows the <i>expected outcomes</i> of the collaboration			
Proposed activities/tasks incorporate the <i>intercultural component</i>			
The planning contains the <i>chronogram- deadlines</i> for the development of sessions and delivery of activities			

It has a clear distributions of <i>responsibilities</i> among COIL instructors			
<i>Class materials</i> are included in the planning document			
The planning includes the kind of <i>technology/resources</i> to be used during the COIL course			

Appendix E: Likert questionnaire

Research questions	Research objectives
<ul style="list-style-type: none"> • What are the characteristics of courses described as COIL? • What factors influence the implementation of COIL courses from Latin American teachers and students’ perspectives? 	<ul style="list-style-type: none"> • To identify the characteristics of courses described as COIL. • To determine the factors that might affect the design and implementation of COIL courses

Section 1: Profile of the students

1. Name
2. Please indicate your age
3. Where are you from?
4. What was your affiliation with the COIL course? Name the institution where you study.
5. Was this your first time taking a Collaborative Online International Learning (COIL) course?
 - Yes
 - No
6. What timeframe did you generally use to connect with your classmates to do projects and/or homework? (Your local time)
 - Mornings (7-10 a.m.)
 - Noon (12 m-2 p.m.)
 - Afternoons (2:00- 5:59 p.m.)
 - Evenings (6:00- 8:00 p.m.)
 - Nights (8:00-midnight)

7. How did you mainly communicate with your partners in this course?

- WhatsApp
- Microsoft Teams
- Zoom
- Google Meet
- E-mail
- Other

Objective of the question	Question
Evaluate the efficacy and effectiveness of the COIL approach based on the students' perspectives.	Based on your experience, do you agree with the teaching and learning processes oriented through the use of Collaborative Online International Learning (COIL)? <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Identify the relevance and impact of COIL on the students' learning.	Do you consider that through the COIL sessions, you were able to improve your learning? <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Determine the degree of inclusion of the intercultural component.	Do you consider that the intercultural component was highly included in the COIL course? <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Know the achievement of objectives from each one of the participating students.	Do you consider that the COIL course fulfilled your expectations in terms of technology use? <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Know the achievement of objectives from each one of the participating students.	Do you consider that the COIL course fulfilled your expectations in terms of development of intercultural competencies? <ul style="list-style-type: none"> • Strongly agree

	<ul style="list-style-type: none"> • Agree • Neutral • Disagree • Strongly Disagree
Determine the influence of COIL with the development of knowledge.	<p>Do you believe that the use of COIL facilitated your knowledge acquisition?</p> <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Evaluate the pertinence of the activities included in the COIL course for the learning process.	<p>Do you consider that the activities implemented during the COIL course contributed to your learning process?</p> <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Analyze the interaction between instructors and students considering their different cultural backgrounds.	<p>Do you consider that the communication and interaction with the COIL instructors was adequate?</p> <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Analyze the interaction between students considering their different cultural backgrounds.	<p>Do you consider that the communication and interaction with your classmates was respectful?</p> <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Determine if the length of the course was suitable considering the objectives of the approach and the expectations of the students.	<p>Do you think that the length of the COIL course was sufficient for your learning exchange?</p> <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Establish benefits or weaknesses of COIL from students' experiences with the approach.	<p>Do you think that participation in the COIL course provided the opportunity to meet new people, cultures, and countries?</p> <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral

	<ul style="list-style-type: none"> • Disagree • Strongly Disagree
Characterize a learning environment framed by the COIL approach.	<p>Did you find the COIL course dynamic and motivating?</p> <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Evaluate the implemented platforms during the COIL course with their effectiveness or ineffectiveness.	<p>Do you think that the use of the virtual platforms chosen was adequate for the development of the COIL course?</p> <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree
Analyze from the students' lenses their degree of preference towards the implementation of the COIL approach.	<p>Considering all the aspects included in the course developed, do you consider that the COIL approach implemented in the sessions was to your liking?</p> <ul style="list-style-type: none"> • Strongly agree • Agree • Neutral • Disagree • Strongly Disagree