

Enhancing Intercultural Skills Through a COIL Experience

Mejora de habilidades interculturales a través de una experiencia de aprendizaje colaborativo internacional en línea

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This paper describes a case study of instructional strategies employed in a collaborative online international learning experience between students from Colombia and the US to increase their understanding of cultural tolerance. The study aimed to examine student perception of their intercultural skills development, particularly in recognizing both cultural similarities and differences, as previous research suggests that students struggle with identifying differences, focusing only on similarities in exchanges. Data were collected from transcriptions of student reflection recordings and their final presentations and were analyzed using the intercultural competence dimensions and subdimensions framework. The findings suggest that participants developed cultural awareness of differences, openness, and tolerance of their own and their partners' cultures and increased their teamwork skills.

Keywords: collaborative online international learning, intercultural skills, internationalization of the curriculum, pedagogical innovation

Este artículo describe un estudio de caso sobre las estrategias de instrucción implementadas en una experiencia de aprendizaje colaborativo internacional en línea entre estudiantes de Colombia y Estados Unidos, enfocada en aumentar la tolerancia cultural. Se examinó la percepción de los estudiantes sobre el desarrollo de sus competencias interculturales, especialmente para reconocer similitudes y diferencias culturales. Investigaciones previas indican que los estudiantes suelen centrarse en las similitudes más que en las diferencias. Los datos, recopilados de transcripciones de reflexiones y presentaciones finales, se analizaron con el marco de dimensiones y subdimensiones de la competencia intercultural. Los hallazgos muestran que los participantes desarrollaron una mayor conciencia de las diferencias culturales, la apertura y la tolerancia cultural y mejoraron sus habilidades de trabajo en equipo.

Palabras clave: aprendizaje colaborativo internacional en línea, habilidades interculturales, innovación pedagógica, internacionalización del currículo

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Introduction

In an increasingly globalized world, developing 21st-century workplace skills, particularly intercultural communication, has become essential for students to thrive in diverse and interconnected environments. Many higher education institutions are internationalizing curricula and focusing on global communication, cultural awareness, and skills such as critical thinking, collaboration, communication, and creativity (Anderson & Or, 2023; Rubin, 2017; SUNY COIL, n.d.). To address these interests, collaborative online international learning (COIL) virtual exchanges have emerged as a powerful pedagogical approach, providing students with opportunities for global engagement, and as a promising avenue for fostering intercultural competencies and 21st-century skills among students (Amaral & McLay, 2021; Bali et al., 2021; Commander et al., 2022; De Wit, 2017; O'Dowd, 2018; Rubin, 2017). COIL can be defined as a virtual exchange that involves collaboration among instructors and students from two or more international higher education institutions: Instructors create a shared syllabus and course learning objectives as well as connect students from their courses through online platforms to participate in peer discussions, joint lectures, and collaborative activities (Barbier & Benjamin, 2019; Bryant et al., 2020; De Wit, 2017; Guadamillas Gómez, 2017; Rubin, 2022; SUNY COIL, n.d.).

COIL exchanges are designed to go beyond traditional classroom boundaries, enabling students to interact with diverse perspectives and develop a deeper understanding of global issues. Research widely suggests that COIL experiences contribute significantly to the development of student intercultural skills, including developing greater cultural awareness and sensitivity, navigating cultural differences, challenging assumptions and stereotypes, and developing empathy and a more nuanced understanding of cultural diversity (de Hei et al., 2020; Deardorff & Jones, 2012; Hackett et al., 2023; O'Dowd, 2021; Paige et al., 2009; Vinagre & Corral Esteban, 2019; Zak, 2021). Research has also shown

that COIL exchanges provide one venue for students to practice these skills in a facilitated environment, allowing them to gain greater awareness of the perspectives of the “other” and to develop a multi-faceted view of social issues and injustices (Helm, 2016; O'Dowd, 2021).

In a similar way, higher education institutions have linked COIL with internationalization processes, which are intentional processes with the objective of integrating the international, intercultural, and global dimensions to improve the quality of education and research, providing a meaningful contribution to society (Ramírez Ramírez & Bustos-Aguirre, 2022). Latin American universities have particularly demonstrated a growing commitment to integrating COIL exchanges, like the *Red Latinoamericana COIL* (LatamCOIL network), an initiative created by the Instituto Tecnológico Metropolitano de Medellín (Zilberberg Oviedo & Krimphove, 2022). In addition to providing international experiences, initiatives like these address equity and inclusion issues by providing rich cross-cultural exchanges to students who may otherwise be unable to participate in study abroad exchanges. For Latin American students, having an international experience is expensive. Yet, innovative pedagogical approaches such as COIL appear as a suitable alternative to develop international and intercultural skills and to provide these learners with the opportunity to have authentic international experiences (Casallas, 2010). In the same vein, Lemos-Shlotter and Tineo Espinal (2023), in a study where they used COIL as an internationalization strategy for the teaching of English, claim that their participants reported high levels of commitment and participation in the topics explored in the experience. They also report that the participants broadened their understanding of the English term “sustainability,” as the Spanish-speaking participants had problems understanding it, given that there are two terms for the same concept in Spanish. Finally, these authors claim that English plays an especially key role when implementing COIL experiences, as it becomes a lingua franca that contributes to developing

a global citizenship that is interconnected not only by technology but by a common language. In other words, COIL allows English to become a language that belongs to the world.

The purpose of our study was to capture student reflections on a COIL experience between two groups, one from a public university in Colombia and another from a community college in the US. We used a single instrumental case study with a holistic and interpretative approach to data analysis, and our data collection instruments were video or audio recordings together with the participants' final products (artifacts). We employed and adapted the Intercultural Competence Dimensions and Subdimensions Framework (Deardorff, 2004, p. 196) as a tool to analyze the information and to explore the participants' perceptions of the experience and how their intercultural skills developed through the COIL experience.

Our COIL experience presented participants with several common exchange challenges and benefits, such as communicating through different time zones, working in an authentic international team, and engaging in critical thinking skills like evaluation, analysis, and comparison. The study also seems to indicate that the exchange provided students with an opportunity to develop a stronger awareness, understanding, and knowledge of their culture as well as that of their partners. Significantly, students identified an increased sense of openness and tolerance by recognizing the differences and similarities among cultures, which suggests a deeper level of cultural understanding.

Literature Review

To understand the development of intercultural skills, scholars have drawn upon various theoretical frameworks. Deardorff's (2006) Process Model of Intercultural Competence offers a valuable perspective to analyze the stages and processes involved in intercultural development. Her model can be used as a framework to guide instructors in developing a curriculum for

COIL exchanges because it promotes both intercultural awareness and assessment of the experience. The framework comprises five dimensions: attitude, knowledge, skills, internal outcomes, and external outcomes, and it implies that intercultural development goes beyond country borders and includes communication "within human diversity that is inclusive of age, race, genders, religions, socioeconomic backgrounds, physical abilities, ideological beliefs, and so on" (Deardorff, 2006, p. 256). COIL exchanges provide an opportunity to go beyond knowledge exchange to include interactions that strengthen intercultural understanding and communication, build teamwork skills, and enhance cultural self-awareness (Deardorff, 2022). From a COIL perspective, the process of exchanging ideas through discussions offers students a forum to initiate and transform their intercultural communication (Arndt et al., 2021; Kumi-Yeboah et al., 2017) in addition to assisting in reducing stereotyping, prejudice, and othering; in many cases, students report finding common ground with their peers (Custer & Tuominen, 2016). Cultural awareness building involves recognizing and respecting differences while fostering a sense of curiosity and openness.

In COIL exchanges, empathy plays a crucial role in fostering intercultural competence. Additionally, virtual exchange provides students with immersive experiences that enhance their ability to understand and appreciate diverse perspectives and impact their cultural sensitivity and adaptability. By engaging students in collaborative projects and discussions, they develop a heightened sensitivity to the experiences of others, a key component of intercultural empathy (O'Dowd, 2021; Thorne, 2016; Verzella, 2018).

Other studies have also pointed out that COIL experiences contribute to student intercultural effectiveness and cultural humility (Anderson & Or, 2023), which is "a process of openness, self-awareness, and incorporating self-reflection and critique after willingly interacting with diverse individuals" (Foronda

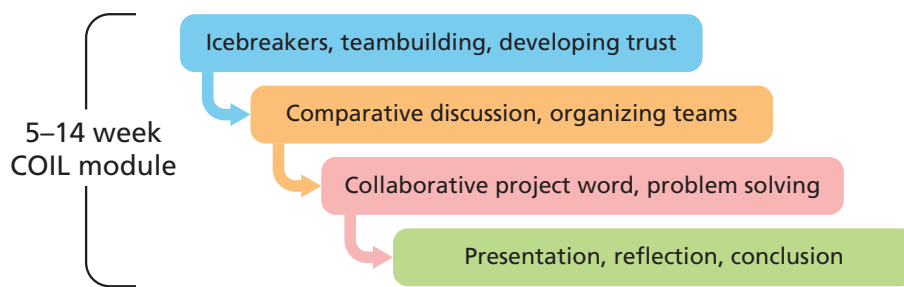
et al., 2016, as cited in Anderson & Or, 2023, p. 213). Students who develop cultural humility demonstrate an awareness of others' perspectives and perceive their peers from diverse cultures as equals; a viewpoint that fosters collaboration, mutual empowerment, and teamwork.

However, King de Ramirez (2021) points out that exposure alone does not necessarily make intercultural competence grow; furthermore, the academic nature of the exchange may impact student engagement and experience. Without instructor guidance and support, virtual exchanges could potentially enforce assumptions or create a superficial experience of cultural awareness (O'Dowd, 2021). Instructors can help move from this surface-level engagement by introducing difficult topics into the exchange (Helm & Guth, 2012; Vinagre & Corral Esteban, 2019); otherwise, students may fall back on completion of the project tasks and avoid facing up to differences, confrontations, or barriers to completing the tasks. Bassani and Buchem (2019) likewise found

that students' lack of confidence in their English skills, as well as elements like time zone differences, challenged both synchronous and asynchronous communication and cooperation. Furthermore, Curtindale et al. (2020) point out that additional barriers affect the success of student intercultural collaborations, such as assessment techniques, student resistance to meeting outside of class, and inability to use various technologies.

Research has shown that through intentional design and implementation, COIL experiences offer a platform for students to engage in meaningful cross-cultural interactions, enhancing their communication abilities, empathy, and cultural awareness. Research also suggests that instructor preparation, as well as the preparation of students engaging in COIL, is crucial for success and for avoiding potential conflicts and misunderstandings. SUNY COILs (n.d.) COIL exchange program recommends four components that occur over five to fourteen class weeks in designing the progression of a COIL experience (see Figure 1).

Figure 1. Progression of a COIL Module (SUNY COIL, n.d.)



As explained by SUNY COIL (n.d.), the stages increase in complexity of the critical thinking tasks students complete:

The first stage is team building, which includes introductions and icebreakers to help students get to know and feel comfortable working with one another online and across cultures. The second phase includes comparative discussions and organizing the project that teams of

students will be working on. The third phase is focused on the main activity for the collaboration. This is the time students apply their knowledge, create something together, or have substantive discussions around the topic of the collaboration. The final phase involves the presentation of the completed work, reflection on both the content of the module and the intercultural aspects of the collaboration, and conclusions.

Deardorff (2022) suggests that scaffolding assignments, preparing for intercultural communication strategies, and expectations can assist with the successful implementation of COIL experiences. Finally, in developing project and task-based curricula, student interaction takes place in concrete situations where students must communicate and negotiate meaning to meet their project objectives (Casañ-Pitarch et al., 2020).

Description of the Experience

Instructor Collaboration of Exchange Design

Our exchange curriculum and objectives were developed through frequent meetings before the course exchange. We had weekly meetings to share our syllabus, identify common student learning outcomes and competencies, identify times for synchronous virtual meetings, and determine the exchange's objective. We used a backward design approach (Wiggins & McTighe, 2005, as cited in Dávila, 2017) in which we identified our end goal, determined deliverables, and then planned scaffolded learning activities with weekly due dates.

Selection of the Exchange Partner

This COIL experience included the participation of a higher education institution in Colombia and another in the US. The Colombian host institution is a state-funded university that offers undergraduate and graduate education, and the US counterpart is a two-year state-funded open-enrollment community college that seeks to create learning experiences and growth opportunities for its diverse community.

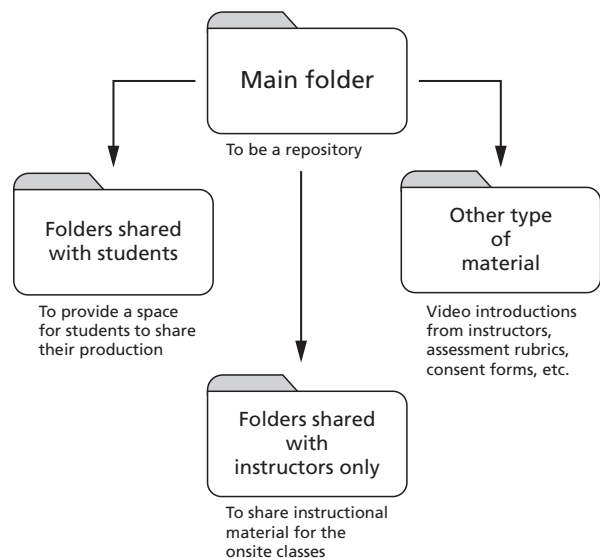
Selection of Technology Tools

File Storage and Folder Sharing

We used a Google Drive folder for storing and sharing files. This folder had two purposes: first, to function as a repository of material (documents, presen-

tations, and instructions for completing activities) and second, as a space for students to share their materials for their final presentations and videos. Figure 2 shows the structure of the folders.

Figure 2. Structure of the Google Drive Folders



Noticeboard

We used Padlet to display students' work and to provide easy access to teaching and learning materials. We divided our noticeboard into these sections:

- basic information about the experience
- video introductions, teams' publications
- shortcut access to the teams' storage and sharing folder
- final task display

The noticeboard also had a display of the video introductions of the participants. Students recorded a short video using Padlet's video-recording tool. Participants provided their names, three hobbies, their favorite food, and their experience learning languages. The participants then responded to the videos by asking a question or posting a comment. Our noticeboard included a space

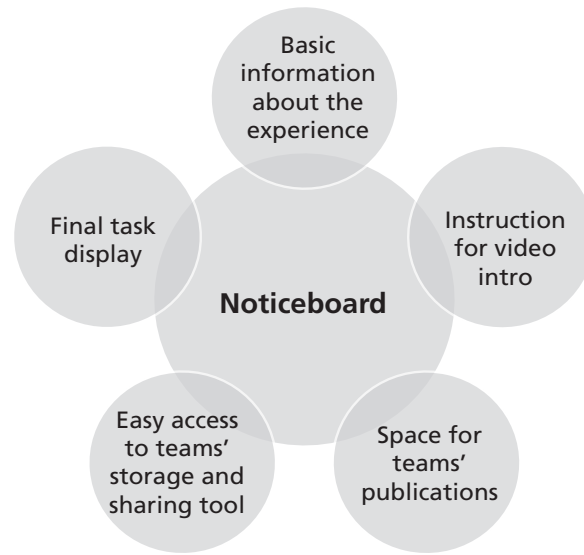
for the participants to share a brief description of their project, including the topic, the perspective, and the reasons they chose that topic. Finally, the noticeboard had a space for the participants to display their final products. Figure 3 shows the structure of the noticeboard.

Instructional Strategies Before the Implementation

Design of the Activities that Frame the COIL Experience

The first instructor activity was to identify a framework that contained all the actions that would happen during the implementation. Drawing from Cuesta and Marsee (2022) suggested framework (Figure 4) for the instructor process of virtual exchange design, which is based on Kolb's Experiential Learning Model (1984), instructors move through a series of components to develop the curriculum for a COIL experience. These components ranged from defining the learning outcomes for both groups to the task's design, the design of the collaborative strategies, and the assessment activities. Figure 4 captures the components and design flow for instructors in the pre-COIL exchange design process.

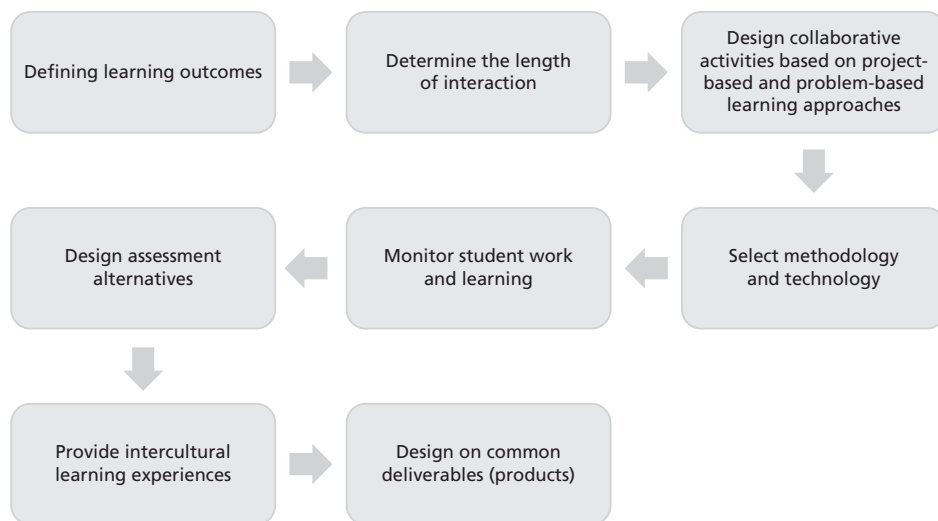
Figure 3. Structure of the Noticeboard



Design of the Task

The second pre-exchange activity was designing the collaborative task that the participants would complete. The task had the following characteristics: It should promote collaboration among participants, it should compare US and Colombian perspectives on a social issue, and it should foster oral and written production. The task asked students to collaborate and synthesize

Figure 4. Instructor Framework for Designing a COIL Experience (Cuesta & Marsee, 2022)



their findings to achieve a common goal. Research suggests that tasks should not be designed solely to compare cultural perspectives because it can lead to

oversimplification and generalization and omit the subtle multicultural differences within a country (O’Dowd, 2021). Table 1 details the task and its components.

Table 1. The Task and its Components

Task	Component
You have been asked to write a 5–7-minute presentation (750–850 words with a minimum of 4 resources) about the similarities and differences between your community and a foreign community. You will want to find an angle for comparison	Promotion of oral/written production Comparison
To do that, you have been paired up with a colleague from Colombia/USA. You must meet regularly with your colleague to discuss the content and provide feedback	Emphasis on collaborative work
You might consider social, political, business/ economic, educational, tourism, environmental, and/ or cultural values (like individualism/collectivism, risk-taking versus conventional approaches, gender power, etc.)	Social issues to be compared
You will write a script and record the video as your final submission. You will upload your presentation to a class Padlet page to share	Final product

Design of the Assignments

Completing the collaborative task involved several assignments. This COIL experience required the students to meet without instructor supervision outside of class hours and attend two sessions guided by the instructors during class hours. They used guidelines with specific assignments for each week. The students had to meet every week for at least one hour and choose the appropriate tool to communicate and collaborate.

Instructional Strategies During the Implementation

Initial Contact With Students

The week before the exchange (named “Week 0”) was used to prepare students with empathetic listening

skills and intercultural communication awareness activities, as well as to introduce the instructors and their city of origin. We introduced and discussed the experience in each group by explaining the tasks, procedures, and activities to complete during the exchange; we also presented the consent form for student signatures.

Subsequent Virtual Exchanges: An 8-Week Plan

During the subsequent eight weeks, we designed a series of activities which we divided into three big sections. Table 2 details the activities and identifies the technologies used by instructors and students for the activity.

Table 2. Details of the Activities and Technological Tools in Each Week of the COIL Experience

Before starting the experience			
Exchange week	Assignment for students	Teachers' activities	Tool
0	Review the explanation of the experience	To make sure students complete the tasks, answer any questions, solve any technical problems	Padlet
	Upload a video introducing themselves		
0	Both groups meet during class overlap to get acquainted		Zoom
During the experience			
1	<ul style="list-style-type: none"> • Complete the video on “The Importance of Empathy” • Complete the “Empathy for Cross-Cultural Communication” • Select the topic of the comparison 	To make sure students complete the task	
2	Select and publish the angle of the comparison	To provide feedback on the angle of the topic	Padlet
3	Complete and publish the first draft of the script and the presentation	To provide feedback on the content of the outline	Zoom WhatsApp Google Meet
4	Complete and publish the first draft of the script and the presentation	To provide feedback on the first drafts	
5	Peer-review the draft and provision of feedback	To guide the process of peer feedback	
6	Complete and publish the final draft of the script and the presentation	To provide feedback on the final draft	
	Final synchronous meeting between students	To guide the session	
After the experience			
7	Publish the final video and complete the assessment instrument	To make sure students complete the tasks, answer any questions, solve any technical problems	Padlet Google Forms

- Section 1: Activities for weeks one to three that included icebreakers (e.g., posting and responding to the noticeboard videos), reading sources on intercultural communication, and forming teams for the collaborative project. When forming the teams, we tried to find a balance by having two members from each institution. However, one team ended up with three American students and one Colombian counterpart. To maintain balanced teams, we had two groups of American-only students participating as well. During these weeks, we had the first activity to select and publish the angle of the comparison (the perspective from which the students wanted to focus their comparison) and publish the first draft of the outline of the presentation's script.
- Section 2: Activities for weeks four to seven that included scaffolded activities focused on completing and submitting the first draft of the script from the presentation, providing peer feedback, and submitting the final draft. This section also included a final meeting of both groups to assess the experience. This meeting took place via videoconference when both class schedules overlapped.
- Section 3: Activities for the final week, during which the instructional strategies dealt with publishing the final video with the presentation and completing the activity assessment.

Method

To assess both our COIL experience and to explore the development of intercultural skills, we used a single instrumental case study with a holistic and interpretative approach to data analysis (Creswell, 2013; Creswell et al., 2007).

Participants

This study had 21 participants, 15 American students and six Colombian students. The Colombian students majored in translation studies and language teaching studies. They were, on average, nineteen years old. The

US students studied different areas such as business, aviation, computer science, psychology, and engineering. Their anchor course, English 101, emphasized rhetoric and composition with a focus on expository writing. They were, on average, eighteen years of age.

Instruments

We had two instruments: (a) a five-minute video/audio about the participants' perception of the experience and of the development of intercultural skills and (b) the videos and presentations that resulted from the COIL exchange.

Data Analysis

We adapted the Intercultural Competence Dimensions and Subdimensions Framework (Deardorff, 2006). Table 3 details the components of the matrix that we designed to analyze the data. Our matrix suggests that the development of intercultural competence has three dimensions: knowledge, attitude, and abilities. Within the knowledge dimension, the matrix encompasses subdimensions such as developing and understanding knowledge about one's own country, as well as that of others and their cultures. In the attitude dimension, the matrix includes the development of openness, tolerance, awareness, and curiosity to the other culture, and within the abilities dimension, there is the development of organizational and technical skills, interpersonal skills, teamwork skills, active listening skills, and skills for creative and critical thinking (which encompass the ability to observe, interpret, analyze, evaluate, relate, and adapt). We included a fourth dimension to explore the participants' perception, including aspects such as the methodology, format, benefits, challenges, disadvantages, relevance, and perspectives of the experience. We placed the instances in the appropriate category and counted the number of instances in each category. For this investigation, we defined an instance as the mention of a category in the data collection instruments. We identified and analyzed 175 instances containing any indication of the categories.

Table 3. Matrix of Analysis of Data

	Perception of the experience	Knowledge	Attitude	Abilities
Development of intercultural competence	Methodology, the format of the experience, the benefits, challenges, disadvantages, relevance, and perspectives of the experience	Development and understanding of their knowledge of the other country and culture	Development of openness, tolerance, awareness, and curiosity toward the other culture	Organizational and technical skills, interpersonal skills, teamwork skills, active listening skills, and skills for creative and critical thinking (the ability to observe, interpret, analyze, evaluate, relate, and adapt)

Findings

Perception of the Implementation of the Experience

The findings of this investigation show that from the 175 instances analyzed, 10.3% (18 instances) indicated students' self-reveal of the challenges, disadvantages, and benefits of the experience, followed by 8% (14 instances) of student reflections on the methodology and design of the COIL experience and its relevance to their ability to engage in learning to write and 6.3% (11 instances) of student reflection identifying perspectives of the overall intercultural competence building experience.

These findings show that the participants' experience helped them understand the other culture. For them, socializing with people from their partner's culture and the research they did collaboratively is perceived very positively. However, they find scheduling meetings challenging because of the participants' work-related activities and the time difference between the two countries. According to these findings, the participants used different technological tools during the experience to communicate and collaborate. They used the collaborative tools from Google during the writing process and Zoom, Google Meet, or WhatsApp to communicate.

These findings show that the participants prefer synchronous meetings over asynchronous ones, as some of them regretted having only two or three synchronous meetings during the exchange, and much of the work took place asynchronously. The following excerpts refer to the participants' use of several tools to communicate and their willingness to have more synchronous meetings:

About the methodology, there was only one way to do this, and it was online. However, I would have loved to have had more synchronous meetings, as we only had two because we all had multiple things to do. (Video opinion 4)

Usually, we used WhatsApp to text or to have group video calls. We also tried with iMessage, but it didn't work. (Video opinion 8)

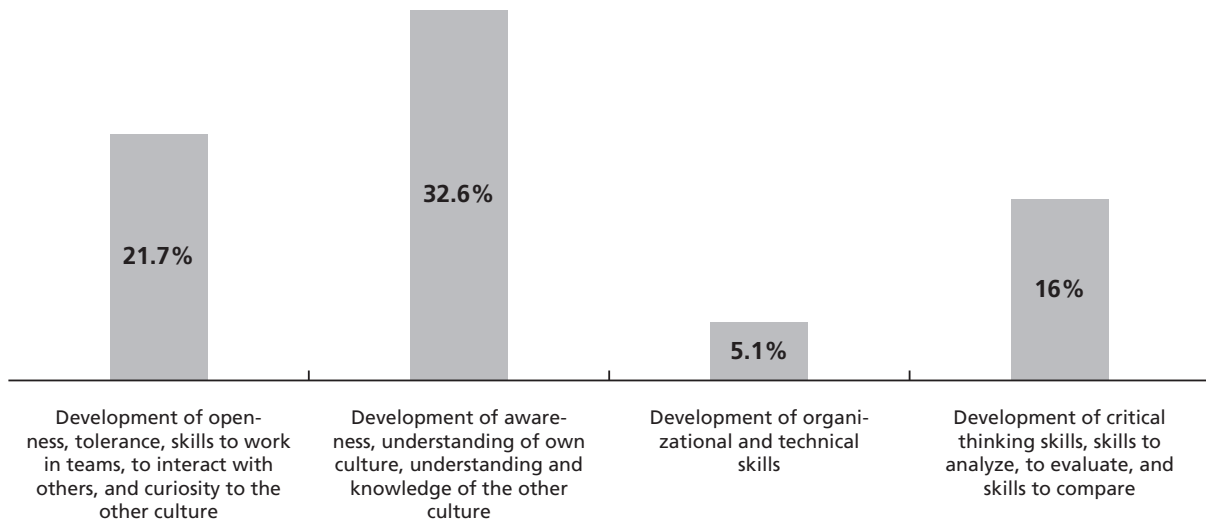
These findings show that one of the disadvantages of the experience was the increase in the participants' levels of anxiety. This is evident in the following quote where one participant says that the experience produced some anxiety because it represented additional academic work to that he already had: "The activity itself was challenging for me and caused me some anxiety. This might have been due to the stress I was experiencing with university work" (Video opinion 2).

Development of Intercultural Skills

The findings show that 57 of the instances analyzed (32.6%) indicated the development of awareness, understanding, and knowledge of one's own and other cultures, followed by 38 instances (21.7%) that showed the development of openness, tolerance, skills for teamwork and interacting with others, and curiosity toward the

other culture. Twenty-eight instances (16%) indicate the development of critical thinking skills, including the ability to analyze, evaluate, and compare. Finally, only nine instances (5.1%) pointed to the development of organizational and technical skills. Figure 5 summarizes the percentage of instances showing the development of intercultural skills.

Figure 5. Percentages of Instances Portraying the Development of Intercultural Skills



An example of the development of awareness and understanding of the participants' own culture is found in this description from one of the final videos of the experience, highlighting problems within the Colombian educational system:

And students have trouble commuting because traversing the woods and the mountains and the rivers can be very dangerous and difficult. There is no public education in those places, and neither parents nor schools have the resources to provide transportation. So, this ends up in children not being able to finish their basic education, so they must drop out of school. This is another way people lose access to higher education here in Colombia, because if you can't finish your basic education, you can't apply for admissions exams in public universities. (Final video presentation 2)

An example of developing openness is seen in the following comment from an American participant, who mentioned that the project provided an open space to speak and hear different ideas:

I just really like that different . . . ideas kind of going around and being able to hear from everyone because I feel like a lot of people, um, believe what they believe, and they're not really open to hearing what other people believe or kind of go through, so I feel like this project was extremely helpful with that. (Video opinion 8)

An example of developing awareness of one's own and others' cultures is this quote from a participant, which shows how he begins to broaden his understanding of another culture by identifying differences between the participants' countries of origin:

After this project, I'm becoming very aware on what the differences are when two very different countries in two different continents even, and it's just kind of interesting to see the differences and be able to get like a firsthand account. (Video opinion 3)

An interesting example of the development of organizational skills is this quote from a participant who expresses the regularity and seriousness with which everyone approached the group meetings, as she explains that all the members of the groups were very committed to completing the tasks:

Some of the benefits that we had in our group were that everybody was really on top of their work, we got everything in on our due dates and we met on Thursdays at 2:00 p.m., and everybody, for the most part, showed up every single time; we took it very seriously. (Video opinion 6)

Another set of skills that the participants in this experience developed was critical thinking skills, which are defined by Scriven and Paul (1987) as "the process of actively conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication" (as cited in Todd et al., 2019, p. 21). For this investigation, critical thinking skills are skills to observe, interpret, analyze, evaluate, relate, and adapt, as identified in Deardorff's (2006) Intercultural Competence Dimensions and Subdimensions Framework. An example of this is an excerpt from one of the final videos where the student explores the reasons and effects of gambling:

[Gambling] tends to impact society as a whole. It impacts crime, business, and the mental health of all those who are involved. Gambling is regulated and sometimes outlawed entirely for good reason. No matter where these games are played, humans in general, no matter where they come from, culturally become greedy, which leads to their clouded judgment and poor decision-making. (Final video presentation 1)

Another important set of skills that we identified in this experience is the skills to analyze. An example of these skills is this excerpt from a final video where the students compared the effects of illegal mining in Colombia and the US. The students provided an analysis of the reasons why people in Colombia and the US end up having undrinkable water:

Whether it be corrupt businesses in Arizona, mining illegally and not following the rules and regulations of their trade, or illegal mining operations with armed individuals in Colombia, one thing stays the same. The people of Colombia, the people of Arizona, and the people of the US are being affected by these malpractices, leaving many with undrinkable freshwater. (Final presentation, Group 3)

Discussion

Although there has been a lot of research on implementing COIL experiences, many benefits have been identified, but continued exploration of the development of intercultural skills, particularly on student's ability to address cultural differences, is lacking (Kučerová, 2023). These findings agree with Kučerová (2023), as she reports that COIL helps students and teachers develop their intercultural and interpersonal skills and gain new knowledge of their own and the others' cultures.

These findings show that one of the disadvantages of COIL experiences is the time differences between the participants, as they are in different geographical locations and in different time zones. In our study, the time difference was two hours (Colombia was two hours ahead of their American counterparts). This presented participants with difficulties meeting synchronously and they preferred to have mostly asynchronous work to complete the task. These findings agree with Kučerová as she says that not only the time difference between countries or academic calendars but also time in general poses a challenge to the success of COIL implementations. However, Marcillo-Gómez and Desilus (2016)

view this as an opportunity to promote asynchronous activities, which allow participants to develop their autonomy and analytical and teamwork skills (Romero-Rodríguez et al., 2023).

The findings of our investigation show that students developed critical thinking skills (i.e., skills to analyze, evaluate, and compare) which can be described as global leadership skills. Our findings are similar to those of Curtindale et al. (2020) who report preliminary findings on the successful use of interdependent intercultural tasks (ITT), a teaching approach that can be used in COIL experiences to stimulate student cross-cultural engagement and to increase their gain of knowledge of cultural differences related to a specific global problem. This ITT approach strives to create cognitive dissonance to motivate students to analyze information about another culture as opposed to passively consuming it (Curtindale et al., 2020). In the ITT process, instructors provide tasks that ask students to learn about subjective elements of another culture by interacting with the exchange peers. In the case of their study, “students discussed native and non-native country media articles describing culture-specific perspectives on a global problem” (Curtindale et al., 2020, p. 81). This activity increased awareness of differences, developed team interaction, and fostered intercultural interaction in collaborative efforts. In our case, students had to compare the similarities and differences between their community and a foreign community. They had to establish the content and the comparison angle considering social, political, business/economic, educational, environmental, and/or cultural values (like individualism/collectivism, risk-taking versus conventional approaches, gender power, etc.).

Finally, the findings of this implementation show that the participants developed openness, tolerance, and skills to work and interact in teams. These findings agree with the findings from Loyo Rosales and Raynal Gutiérrez (2022), who show that the participants in their COIL experience increased their ability to

participate in international online collaboration as well as their openness and tolerance to work with international teams.

Conclusions

The objective of this investigation was twofold: to explore the participants’ perception of a COIL experience and to assess the development of intercultural skills. The following conclusions can be mentioned: First, although the experience was challenging for the participants, it also had many benefits in different areas, such as the use of English for a real purpose, the understanding of the other’s culture and country by allowing the socialization with people from another country, and the use of several technological tools for collaboration and communication. Second, this experience helped participants develop awareness, understanding, and knowledge of their own and others’ cultures. It was also useful for the participants to develop openness, tolerance, teamwork skills, and the ability to interact with people from different nationalities and contexts. Finally, another important conclusion from this experience is that the participants developed their critical thinking skills—their skills to evaluate, analyze, and compare—which are crucial 21st-century skills to develop global citizenship.

This study opens the scope of understanding of how to implement COIL exchanges in higher education institutions and offers a step-by-step explanation of how to set the floor for these kinds of experiences. It also provides an overview of how these experiences help develop skills that are not easily developed using traditional approaches.

This concludes that participation in COIL experiences equipped participants with valuable skills and tools, such as empathy, openness, understanding of their own and others’ cultures, and the ability to analyze, evaluate, and compare. Participants could apply these skills to perform future tasks in international contexts with people from different backgrounds.

This investigation shows that implementing COIL experiences in higher education can be viewed as an internationalization opportunity for students who do not have the economic means to go to a foreign university to study.

Limitations

We encountered the following limitations. First, the number of participants was low and there were twice as many participants from the US, which did not allow an even and homogenous distribution of team members. This placed the Colombian participants in an unequal position. Second, the length of the experience was short, even though other experiences report similar lengths of time, and third, as this was a pedagogical experience rather than a research experience, a more rigorous research design may shed light on different issues that we did not identify.

This investigation shows that there are several limitations when implementing COIL experiences that need to be addressed to ensure the scalability and sustainability of these types of innovative pedagogical experiences. For instance, there can be technological barriers. In the case of this experience, we found that some participants did not have access to WhatsApp, and they had to look for other alternatives. There can also be problems with time differences, which, in the case of this investigation, hindered the possibility of synchronous work.

Recommendations

As pointed out by many studies in COIL exchange, this experience provides an opportunity for students to engage in a globalized experience at home and to broaden their sense of self and cultural awareness as well as to increase their sense of empathy, cultural humility, and awareness (Commander et al., 2022; Giralt, 2020; Helm, 2014; Levinson & Davidson, 2015). By engaging with peers from another country, students are better able to contextualize through personal examples their

partner countries' social and political issues (O'Dowd, 2021). For example, in our experience, several students identified a stronger understanding of the role and value of education in their peer countries. Additionally, using students' ongoing reflections on the experience provides an insight into their perception of intercultural development (Ramírez-Marín et al., 2020).

To move toward the full potential of COIL exchanges and address some implicit challenges, it is important to put several measures in place. Intentional design and collaboration between instructors to create a scaffolded, multiple-staged course schedule are paramount for guiding students through the various stages of intercultural development. Part of that intentional design should include pre-exchange identification of cultural awareness and communication strategies. It is important to have multiple points of instructor feedback and of student reflection on the process (Machwate et al., 2021), including some directed reflection that encourages students to not only identify similarities among their international peers but also to explore differences. Additionally, with potential barriers of time zones, internet service, and complicated schedules, helping students develop project management skills can contribute to the project's overall success. Regular instructor feedback and interaction, as well as regular guided reflection, can support the concerns around students falling into the "illusion of commonality" purported by Ware and Kramsch (2005); they suggest that students can fall prey to only recognize commonalities and identify minor differences like time zones or geographic location.

Further analysis and studies designed to explore the level of cultural understanding and awareness of differences are needed, using both qualitative and quantitative approaches. As suggested by Ramírez-Marín et al. (2020), continuing qualitative analysis of deeper student and instructor reflections may help identify intercultural development constructs by providing more opportunities for differences. They also suggest

assessing student preparedness for virtual exchanges by integrating a global competency questionnaire which would also help “determine barriers and enablers of students’ experiences during the COIL course” (p. 124). A pre- and post-questionnaire may yield further depth to the analysis of student intercultural awareness.

This investigation shows that for COIL experiences to be sustainable, they should be integrated into study programs and require institutional support and continuous professional development for teachers. While COIL experiences can be conducted in any language, English should be used as a lingua franca for communication.

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