## Developing Global Competence among Pre-Service Teachers in a Binational Class through the Collaborative Online International Learning (COIL) Program

Dennis Magbanua, FSC, Ph.D.[1]
Leonor Cremayer, MA[2]
Rogelio dela Cruz, Jr., MA[3]

Internationalization has become a necessary response of higher educational institutions to globalization. Almost all institutions of higher education, public and private, are fast becoming global players, a trend that has been seen in a wide variety of other businesses.[4]

The COVID-19 pandemic forced countries to close their borders and practice social distancing to prevent the coronavirus from spreading these past two years. All across the globe, higher education institutions were forced to switch from traditional classrooms to virtual classes almost overnight. Each was challenged to develop innovative methods of instruction and research.[5] The pandemic also abruptly halted student international mobility, which prompted universities to explore internationalization through virtual exchange. The effect was severe for nations such as the United States, Canada, the United Kingdom, New Zealand, and Australia because half of the world's total population of international students study in these countries.[6] Nevertheless, the need for the internationalization of universities continues as the more robust the international character of a higher education institution, the more opportunities for students to develop their intercultural competency skills[7] or, interchangeably, their global competence.[8]

When the coronavirus was on the verge of reaching pandemic proportions, the International Association of La Salle Universities (IALU) invited me[9] to participate in a training program to design a short course for university students to experience online collaboration with other students across the world. One of IALU's goals is to strengthen the international character of its member institutions through the Collaborative Online International Learning (COIL) Program.[10]

The COIL Program is an in-country international short-term study program that harnesses the online environment for students to experience cross-cultural education. It can also be described similarly as "internationalization at home," a phenomenon Crowther et al.[11] put forward in a position paper to the European Association for International Education. In general, the collaborative feature of COIL is based on the notion of equal participation by all professors involved in COIL, with each partner taking into account the viewpoint of the other.[12] In this case, my co-author[13] and I attended an IALU-sponsored COIL Program training workshop to create an online collaborative program for future IALU students.

The COIL Program is not the classical form of distance education where a university simply offers an online course for international students to take. COIL is an educational paradigm comprising three major components: (1) pedagogy, (2) technology, and (3) cross-cultural

learning.[14] The Program is neither a tool nor a platform for technology but an intentional paradigm for teaching and learning that fosters cross-cultural awareness in shared multicultural learning spaces.[15] COIL is also not a form of student mobility in the physical sense. The Program encapsulates the four constitutive aspects of a proper virtual exchange, and these are: (1) it is a joint effort between professors and students, (2) it is an online engagement, (3) it has potential for global reach, and (4) it is incorporated into the educational process.[16]

As a professor in educational technology at De La Salle University (DLSU) in the Philippines, I was paired with my co-author, a media communication in education professor at Universidad La Salle (ULSA), Mexico City, to implement the COIL Program in our two distinct classes. Our binational class followed an eight-week fully-online cooperative syllabus that we designed, focusing on cultural sharing and applying a problem-solving approach to contribute to the United Nations Sustainability Development Goals (UN SDGs).

The binational class was composed of six graduate school students from DLSU enrolled in an educational technology course which is a requirement for these students to complete the Teacher's Certificate Program, and 14 undergraduate students from ULSA enrolled in a media for educational communication course, which is a requirement for the students to complete their undergraduate degree in teacher education. The students from DLSU joined the Zoom meeting at 8:00 PM in the Philippines, which was 7:00 AM on the same day in Mexico City for their ULSA counterparts. In summary, all the participants in the COIL Program were Pre-Service Teachers (PSTs). These PSTs attended one-hour weekly classes from 5 March 2021 until 25 May 2021.

The challenge of contributing to the United Nations Sustainable Development Goals (SDGs) was used as a common ground for project collaboration. All UN Member States, including the Philippines and Mexico, endorsed the 2030 Agenda for Sustainable Development in 2015. The agenda provides a shared roadmap for people and the earth regarding peace and welfare today and in the future. At its core are the 17 SDGs, an urgent call to action for all countries to work together as citizens of one world. The goals include eradicating poverty and hunger; ensuring good health and well-being, gender equality, and quality education; food production; water conservation; and fighting climate change.[17]

The initial collaboration between my co-author and myself started on 25 August 25 2020 when we, as previously noted, underwent a five-week online training workshop on COIL Program implementation under the auspices of IALU. The program ended with us gaining a more profound knowledge of each other's cultural similarities and differences, collaborating to create a proposed COIL Program course syllabus (cf. *Appendix One*), and deciding to implement the IALU-sponsored COIL Program by March 2021.

As shown in the learning syllabus to be found in *Appendix One*, the COIL Program for this binational class was scheduled for eight weeks, including Week 0, held before the official start of the implementation. The four major stages of the syllabus are ice-breakers, comparison and analysis, collaboration, and celebration. The specific objectives are clustered as follows: (1) get to know one another and each other's country's culture, (2) research a problem besetting their countries based on the UN Sustainable Development Goals, (3) collaborate on proposing

possible solutions to the chosen problem, and (4) celebrate the team's achievement and the friendships formed.

As described in *Appendix One* are class activities, such as group sharing, lectures, team meetings, pitch presentations, and cultural presentations. Student outputs are a one-minute self-introduction video, a table describing the similarities and differences in the cultures of the two countries, a paper expounding on the team's chosen SDG, a slide deck for pitch presentation, and a cultural presentation. The summary of the technology platforms used in the class is as follows: Zoom, Flipgrid, Canva, Facebook, online resources, MS PowerPoint and Apple Keynote. Lastly, five out of the eight weeks were held in synchronous mode, which accommodated the academic calendar of both universities, national holidays, and the challenges of the lockdown protocols brought about by the response of each country to control the effects of the pandemic.

It is significant to note that no research has previously been conducted on any IALU version of the implementation of the COIL Program.[18] This study represents a pioneering attempt to evaluate the Program's implementation among members of IALU. It also adds to the ever-expanding body of studies in the internationalization of higher education.

This study sought to answer the following questions:

1.  Did the Pre-Service Teachers (PSTs) perceive that they have achieved the COIL Program objectives on the development of skills in: (a) collaborative learning or telecollaboration, (b) use of online technology or digital literacy, and (c) cross-cultural learning brought about by a virtual exchange?
2.  What was the perceived impact of the COIL Program on developing the skills necessary for global competence?
3.  What were the commonly experienced difficulties by the participants during the COIL Program?
4.  What structures or resources helped the participant in achieving the COIL Program objectives?

**Literature Review**

The review of related studies showed that, in general, the COIL Program design implemented in different universities worldwide is varied. Nevertheless, it still retained the essential nature of collaborative online international learning. The COIL Program is, as previously noted, an educational paradigm composed of three elements: (1) collaborative design, (2) online technology, and (3) cross-cultural learning.[19]

Jacobs et al.[20] studied their group's COIL Program implementation using an appreciative inquiry lens. They concentrated on opportunities, understanding the project's strengths, the consortium partners' different settings, and creating a better self via dreaming and performing the dream despite hardships. The same study used a second lens, considering the phenomenon as a mosaic of collective identity. The third lens assumed an insider-researcher approach and acknowledged their subjectivities in their shared experiences.

The researchers proved that their implementation had: (1) strong conceptualization and proposal writing, (2) thorough management and administration, (3) validating and encouraging relationships, (4) values, and (5) enabling collective leadership. They also proposed that the COIL Program be used more extensively in international research-practice partnerships and as an approach to internationalizing the curriculum.

Suarez and Haduch[21] described three types of COIL implementation which were as follows: (1) *online*: the course is divided into two or more groups of students from various countries, and two or more instructors teach and oversee the course work wholly in an all-online environment; (2) *dual hybrid*: two or more groups of students from various countries participate in the course, with faculty members from each participating institution co-teaching and supervising the material; each group of students meets with a teacher every week; in contrast, the broader group collaborates online on particular tasks and collaborative output; and (3) *carrot*: each participating university offers one or more students the chance to go to their partners' countries to showcase their final requirements and meet their counterparts.

Based on the types of COIL implementation that Suarez & Haduch[22] described, the phenomenon being studied in this research is similar to the first. The binational class was held online for eight weeks, half synchronously via Zoom and half asynchronously. Due to the uncertainties created by the pandemic in early 2021 and the vast time-zone difference and potential language barriers, the professors purposefully divided the students into teams within their countries. Thus, the students were grouped into three teams of six to seven members. The coursework was then developed to facilitate in-country student cooperation during asynchronous times and cross-country collaboration during online synchronous sessions. While it seems that the groupings of the students do not conform to the "ideal size,"[23] we believe that the time allotted for the coursework did not allow the flexibility of having more than three project presentations at the end of the Program.

**The COIL Program as a Collaborative Online Cross-Cultural Learning Paradigm**

In its preferred pedagogical design, the COIL Program is an experience of collaborative learning between professors and students, especially from two or more cultural backgrounds.[24]

In their book *Collaborative Learning Techniques: A Handbook for College Faculty*, authors Barkley et al. regard collaborative learning as interactive group work with three features: (1) intentional design, (2) co-laboring, and (3) meaningful learning. Intentional design refers to purposeful groupings and interactions that occur within these groups. Co-laboring involves each student engaging in the process and contributing to the group's products. Meaningful learning engages students to exercise responsibility and ownership over their learning. In Chapter 2 of *Collaborative Learning Techniques*, the authors also note ample evidence that collaborative learning can: (1) "improve student learning in online courses," (2) "help eliminate feelings of isolation students may feel in an online course," (3) "help students forge relationships with their peers," and lastly (4) "improve outcomes in online courses."[25] While the debate continues on the correct terminology to call this technique akin to cooperative learning, according to the authors, the two methodologies are not fixed. Instead, they are both dynamic and adaptable.

Tied to the concept of collaboration is telecollaboration. Telecollaboration is defined as internet-based intercultural communication between people from different cultures and countries who work together in an organized way in an institutional setting. The goal is to improve language skills and intercultural communication skills through structured assignments.[26] Thus, the COIL Program can be described more specifically as a form of telecollaboration since the Program fosters cross-cultural collaborative learning experiences, uses online technology and pedagogies, and caters to foreign language learning.[27]

In the area of collaborative learning, IALU's implementation of the COIL Program expects the students to develop the following: (1) interdisciplinary skills, (2) interdependence skills, (3) problem-solving skills, (4) leadership skills, and (5) self-confidence.[28]

Ellis defines interdisciplinarity as

> a learning mode involving the exploration of issues, problems, knowledge, and understanding through the integration and synthesis of theoretical or methodological procedures or both which draw upon more than one discipline or challenge conventional disciplinary approaches.[29]

Individuals or teams integrate data, methodologies, views, notions, and ideas from two or more fields and discover or draft potential solutions.

The COIL Program's cross-disciplinary activities assist in honing students' interdisciplinary skills. Students are compelled to contribute their viewpoints to gain a more unified yet diverse look into the projects they work on, which is "becoming a necessity in the workplace."[30]

In our binational class, students were either taking a degree in education (ULSA) or completing a teacher's certificate to take the licensure examination for teachers (DLSU). The DLSU students had diverse undergraduate degrees such as entrepreneurial management, community development, psychology, and broadcast communication, which can bring interdisciplinary discussions and viewpoints, especially in making their project proposals.

The degree to which team members collaborate and work together to fulfil tasks is described as interdependence.[31] One of the most common demonstrations of the value of interdependence is the dynamics behind basketball teams. De la Torre-Ruiz & Aragon-Correa[32] studied the data available from 584 National Basketball Association (NBA) teams over 21 seasons and discovered that team performance, and the best team-member performance, improve when the rest of the team members' performances improves. This means that having a team player who does very well does not guarantee that the team has better chances of winning over the competition. The rest of the team must deliver exceptional individual performances to achieve a competitive edge.

In the COIL Program implementation, interdependence is a skill that is expected to be developed. Interdependence implies that while students can advance their ideas, they also acknowledge that others in the team may be more informed about the topics discussed.[33]

In our binational class, students were divided into teams where they were encouraged to listen to the members' ideas in developing proposed solutions to pressing local problems in education. They were also asked to share their talents and ideas to prepare their final report and pitch their proposed solutions.

It may seem that solving contemporary problems may be easier because of personal computers and the internet. Editors Ifenthaler et al.[34] disagree with this line of thinking in three ways. While most students may now obtain information more quickly through internet search engines, it is critical that they first determine precisely what they are looking for; otherwise, the search will be inefficient. More often than not, students search to learn more; but only a few have learned to search efficiently.[35] Second, it is critical that the data gathered during the search be accurate and verified. Third, due to increased access to knowledge that might assist in issue solving, picking from a plethora of answers can also become challenging.

In our binational class, students were instructed to identify local problems, research the root causes of these, identify those who are affected by these and propose a human-centered design solution. They had to do all of these online because of local pandemic protocols.

Geyer et al.[36] worked on the data from 970 university students to research the impact of American students' short-term study-abroad experiences and how the experience shaped their leadership skills and career goals. They noted that little research has been undertaken on the association between short-term study programs to leadership and career aspirations. The results of their study show that long-term study abroad has no discernable effect on leadership. However, a short-term study program was found to be more significantly impactful. The results tell them that studying abroad affects leadership only in the first part of the program. That is why short-term programs have a more significant effect on developing leadership skills.

A more defined characteristic of leadership in terms of influence is authentic leadership. Lyubovnikova et al.[37] examined how this form of leadership influences team performance using survey data from 53 teams belonging to three organizations in the United Kingdom and Greece. To them, authentic leaders serve as powerful role models, influencing task-related team processes directly via their self-regulation behaviors.

In our binational class, students were given tasks to develop leadership skills, such as being the team leader and providing opportunities to put forward their ideas and take action on the direction and the presentation of their project proposals.

Self-confidence is the assessment of one's capacity to effectively complete a task based on the person's assessment of his or her total capabilities, motivation and resources available.[38] This is a valuable skill because it increases an individual's drive to take on initiatives and continue to pursue one's objectives in the face of failures and distractions.[39]

The nature of the COIL Program to use learning methodologies specifically intended to maximize the group-learning experience is expected to help students improve their self-confidence and critical thinking abilities.[40]

In our binational class, students were given opportunities to develop self-confidence by introducing themselves in English, telling stories about their country's culture. and presenting their ideas during the pitching of their project proposals.

While the terms "online" or "online technology" have been used to define this second aspect of the COIL Program, digital literacy is more appropriate to describe the inherent goals behind the intention to situate this teaching and learning paradigm online.

While there are continuing debates about the notion of digital literacy as a competency,[41] Huvila adopted the concept that this competency is at the midpoint of a set of technical skills and mastering creative concepts.[42]

In the area of online technology, or conversely in this research, digital literacy, IALU's implementation of the COIL Program expects the students to develop the following: (1) skill in using apps for online communication, (2) skill in online research, (3) skill in creating content / media, (4) skill in presenting online, and (5) skill in working virtually.[43]

The pandemic accelerated a significant shift globally from face-to-face communication to online communication. In the Philippines, the percentage of social media users aged 16 to 64 increased by 64% in April 2020, as reported in the GlobalWebIndex survey. The same survey notes that the world average was 47%. In Mexico, people spent more hours online in 2020 than in 2017, from 3 hours and 11 minutes to 3 hours and 23 minutes on average.[44] Similar changes brought about by the pandemic to digital communication habits were seen in a study of 1,374 American adults in April 2020 when there was a two-week lockdown in specific parts of the United States of America. Among the findings were that those with limited internet skills upped their digital communication by 63% and that "face-to-face" digital engagements through video-conferencing programs rose as well.[45]

In our binational class, students were exposed to the weekly meetings via Zoom. Because of social distancing protocols brought about by the pandemic, the students were discouraged from meeting in person. They were instead told to use direct messaging apps as their line of communication.

In most nations, social distancing measures have stopped individuals from physically accessing library facilities and materials. Students started to use the online services of their university libraries and scoured the internet for research. Online research delivers a variety of educational advantages. Weber et al.[46] refer to online research as information-seeking behavior and found that students who used sophisticated web-search tactics also earned better marks in college. However, because many students are unaware of online academic resources, they opt to research just utilizing well-known search engines such as Wikipedia.[47]

The safety of the students in our binational class was of utmost importance, especially during the pandemic. Thus, the students were asked to research online since the university libraries were closed; and visiting the communities or individuals they planned to connect within their research was still at high risk.

While there is a dearth of studies on building skills for media or content creation for online presentations, an illuminating comparison is provided by digital storytelling. Using channels with which students are accustomed, digital storytelling by creating content or media may equip students with a voice to genuinely engage internationally.[48] Students gain visual design abilities when they create presentations, a valuable skill for entering the industry.[49]

In our binational class, students were asked to show pictures of their country and culture as part of their self-introduction. They were also instructed to create a slide deck to describe their project proposals. These decks were used as visual aids in the project-proposal pitch presentations, which were part of the culminating activity of the course.

Academics place a premium on delivering high-quality presentations to engage students and foster learning. With the ubiquity of online classes, college students are expected to know how to present virtually in an effective manner. Whether onsite or online, the experience of doing presentations, as seen in studies on the use of Pecha Kucha among university students [a presentation where new slides are shown automatically every 20 seconds], increases the students' oral communication skills, develops their ability to organize information, and present this information more understandably to their professors and peers.[50] In a study of the experiences of adult students with online oral presentations in Australia attending by distance learning, authors McDougal and Holden[51] found out that this exercise met various crucial requirements of adult students. For many students in that study, these were purposeful and, even for some, transforming experiences.

Our binational class presented project proposals as pitch presentations as teams. Each team was given ten minutes to present their project with the instruction that everyone should contribute to the oral presentation.

There is a fundamental shift in how people work in teams, as brought about by the pandemic. Working together virtually, referred to as remote work or teleworking, is now required to respond to social distancing measures. Recent statistics show that there has been a spike in teleworking. In 2020, 47% of workers in Australia, France, and the United Kingdom teleworked during lockdowns. Between December 2019 and May 2020, Japan's teleworking rate climbed from 10% to 28%.[52] An editorial that reviewed several types of research claims that virtual work in teams is going to remain and thrive post-pandemic, noting that additional studies should look into the concept of what is genuinely virtual, consider individual experiences and the impact of technology, describe emerging models of formal and informal leadership in virtual teams, and lastly describe behaviors and interactions that contribute to the success of virtual teams.[53]

Our binational class was, as previously noted, done entirely online in both synchronous and asynchronous modes. The whole class was divided into three teams to prepare project proposals. Because the class was held during the early parts of the pandemic and the students were still learning the ropes of online classes, the professors decided to put less pressure on the students by assigning only team members from within their country. This way, possible obstacles that time zones and other forms of online communication might cause would be lessened, and project proposals would be more feasible. With the team members set, the students were encouraged to arrange their meeting times to work on the project proposals.

Cross-cultural learning is an integral aspect of the COIL Program's teaching paradigm. This pedagogical approach deepens one's awareness of one's culture compared to another's, developing cross-cultural competence.[54] The internationalization of education helps students develop this form of competence to navigate a future with a diverse workforce because of different cultural backgrounds, more so when physical national borders are erased through virtual means.[55]

Ramirez-Marin et al.[56] conducted qualitative-interpretative research on the COIL Program implementation between the University of Washington at Tacoma (USA) and the Universidad Veracruzana at Veracruz City (Mexico). In a six-week-long online project, three professors and forty students worked collaboratively. The researchers chronicled the cross-cultural learning experiences between these two groups of students affected by their disparate language and cultural backgrounds. Throughout the length of the course, observations and field notes were taken. Semi-structured in-depth interviews were also undertaken. Finally, some parts of the writing assignments were purposely chosen for examination to verify facts gleaned from interviews. The research findings show that the Program elicited reflection on issues of learning a language, cultural understanding, and shared life perspectives. It also promoted the development of facets of cross-cultural competence.

Guimarães and Finardi[57] looked into the COIL Program as an alternative Thirdspace for global citizenship education (GCE) in internationalization. According to them, although universities worldwide have promoted the development of intercultural competence among students, the efforts made are still myopic since GCE is not seen as a powerful force capable of assisting in constructing a sustainable society or combating wicked problems. In addition, various models of internationalization introduced in Canada, the United Kingdom, Australia and New Zealand – with the primary objective of addressing student and faculty mobility and integrating intercultural content in the offerings – still failed to include modes of collaboration. Thus, they describe the need for a Thirdspace as a construct that allows technology-enabled learning by serving as a bridge for educators to explore multiple viewpoints and alternatives. Further to this, the pandemic also altered the educational environment, which necessitates the development of empathy for the well-being of interconnected humanity.

The pair investigated the topic in two phases. The first phase utilized bibliographical research, where they constructed the corpus of analysis by searching three major databases. The second phase consisted of passing the corpus through the language-corpus management and query system known as the "Sketch Engine" platform to conduct a content analysis and determine the primary topics relating to GCE. Then they contrasted these with their earlier discussions to develop proposed alternatives.

Their findings suggest that the advice from experts to transition away from present neoliberal concepts of global and local education toward more responsible forms of global and local education is worth considering. They saw that this Program of virtual exchange is a more balanced approach to promoting cross-border and cross-cultural dialogues. They argue that the Program should be more open to using languages other than English to be adopted by more universities.

In the area of cross-cultural learning, or interchangeably in this research, cross-cultural competence, IALU's implementation of the COIL Program expects the students to develop the following skills: (1) cultural awareness, (2) cultural understanding, (3) engagement in shared multicultural spaces, (4) foreign language learning, and (5) community and interconnectedness.[58]

Cultural awareness refers to an individual's understanding of his or her culturally-based preconceptions, stereotypes, and prejudices and his or her ability to operate on that awareness to alter his or her communication and relationships. It is the recognition of how one's culture varies amongst individuals and groups.[59]

In our binational class, students were asked to introduce themselves, their country and their culture. Each student had to show photos to share online with students from another country. By expressing these ideas about their country, the students were expected to be more aware of their own culture and traditions and be proud of them.

Cultural understanding is the capacity to comprehend and interact with individuals from diverse cultural backgrounds.[60] While the term is used interchangeably in different publications, this research's definition of cultural understanding is nuanced from cultural awareness. The latter focuses on one's cultural knowledge, while the former deals with the interaction of this knowledge with other cultures.

As the students in our binational class listened to their cross-border classmates talk about themselves, their country and culture, the development of cultural understanding was expected. Mexico and the Philippines have similar historical links with Spain, and thus the reason behind the countless shared customs and traditions between the two countries. As the students expressed during the course, there was a discovery of the different customs and ways of thinking between the two countries. We acknowledged these similarities and differences and encouraged students to appreciate and respect these.

The context of a COIL experience is held in a shared multicultural space in an online environment. A multicultural space is not a static milieu. It can be characterized as a process of communicative and instructional interaction amongst the students that arranges the social environment around the unique characteristics of their different cultures. Multicultural spaces acknowledge the students' social and cultural worldview, culture, and acceptance of other people's cultural values.[61]

The students' engagement in the shared multicultural space of our binational class added another dimension to the earlier skill of working virtually. The virtual environment is by itself a context in which to engage. With two nationalities, different time zones, and English as the preferred language for communication, the professors considered a course design to further expose the students to engage in a shared multicultural space, similar to today's globalized work environment.

Isabelli-Garcia et al.[62] compiled empirical evidence on undergraduate language learners' experiences abroad during a one-year period or shorter. They noted that globalization's tendency

toward the prominence of English-language competence objectives in educational systems, owing to English's prominence as the global language, may be diminishing the urgency of non-English language learning.

In Suarez & Haduch's study on foreign language acquisition during COIL Program implementation,[63] the students' final presentations were held in person, where the American university student had to present in Mexico and the Mexican university student had to be in the United States to do the same. The students enrolled in the American university presented their project entirely in Spanish while the Mexican students presented in English, proving that telecollaboration has paved the way for the students' full bilingualism.

Ramirez-Marin et al.[64] studied a collaborative online project between a Mexican and American university that partly aimed at language learning. The researchers recounted situations where students discussed and reflected on the meaning of learning a foreign language. They recognized that learning English may influence the real-world possibilities available to young people in the United States and other nations, affecting their future.

In this study, the DLSU students were generally fluent in English, their second language, but had minimal knowledge of Spanish. The ULSA students were fluent in Spanish, their native language, but some had difficulty expressing themselves in English. While language learning was not the main focus of this COIL Program implementation, the formal and informal interactions among students became avenues for foreign language learning.

Spiro[65] researched four small-scale activities where students collaborate on practical issues across cultural borders. The results indicated that students who participated in practical and pragmatic cross-cultural interactions underwent major shifts in their preconceptions. They could more easily consider themselves part of a global community of learners.

During the online meetings of our binational class, it was observed that the students were showing interest in being part of the class as attendance was complete most of the time. The Program expected students to introduce themselves, their country and culture to develop a sense of community and interconnectedness. The professors organized talent and culture performances during the last online class to celebrate newly-formed friendships.

### *The Global Competence Learning Continuum*

There are several frameworks for global competence, such as: Mansila & Jackson's *Four Domains of Global Competence* (2011); OECD's *The OECD PISA Global Competence Framework* (2018); UNESCO's *Global Citizenship Education Key Learner Outcomes* (2015); United States Department of Education's *Framework for Developing Global and Cultural Competencies to Advance Equity, Excellence and Economic Competitiveness* (2017); and World Savvy's *Global Competence Matrix* (2018).[66]

Because the COIL Program can be considered as a way to achieve global competence, this research chose to use the global competence framework as defined by the Association of Supervision and Curriculum Development (ASCD), known as the Globally Competent Learning

Continuum. The Continuum was developed in 2013 by a team of researchers at the University of Northern Carolina at Chapel Hill, USA. The Association defines global competence as the essential collection of two types of dispositions, four elements of knowledge, and six skills necessary for teachers to live and work in a globalized society.[67]

This framework has been adopted because it deals explicitly with global competencies needed by present or future teachers. Globally competent teaching calls on teachers to adopt and acquire a global mindset and knowledge. It also requires them to integrate their global competence into their classroom. The ASCD encourages PSTs of all grade levels and subject areas to look into their global competence, as can be found in *Appendix Two*. It aims to move along the Continuum through training and professional learning resources.

Since the participants in the research being presented here are PSTs, most have not formally taught in a classroom. They are still in the process of being certified or licensed as a teacher. Therefore, in this particular treatment of the Globally Competent Learning Continuum, only parts of significant relevance to the participants were considered, namely: the two termed "Teacher Dispositions" (empathy and valuing multiple perspectives & commitment to promoting equity worldwide), the four termed "Teacher Knowledge" (understanding of global conditions and current events; understanding the ways that the world is interconnected; experiential understanding of multiple cultures; and understanding of intercultural communication), and the first of six termed "Teacher Skills" (communicate in multiple languages). Based on the detailed descriptions of the Continuum, the remaining five "Teacher Skills" (create a classroom environment that values diversity and global engagement; integrate learning experiences for students that promote content-aligned explorations of the world; facilitate intercultural and international conversations that promote active listening, critical thinking, and perspective recognition; develop local, national, and international partnerships that provide real world contexts for global learning opportunities; and develop and use appropriate methods of inquiry to assess students' global competence development) can only be best measured when these students are already teaching.

**Methodology**

Using the mixed-methods explanatory sequential design,[68] we evaluated whether the PSTs had achieved the COIL Program objectives on the development of skills in collaborative learning or telecollaboration, use of online technology or digital literacy, and cross-cultural learning brought about by a virtual exchange. Furthermore, we investigated the quality of global competence of the PSTs through the COIL Program. The research process collected and analyzed data generated from a post-course survey questionnaire. The survey aimed to determine the participants' perceptions concerning their achievement of the COIL Program objectives and global competence skills. The initial results of the survey were used to guide the subsequent qualitative data collecting process in the form of focus group discussion (FGD). The FGD aimed to collect data to explore and explain further how participants perceived whether the COIL Program had helped them with the development of collaborative learning or telecollaboration skills, use of online technology and digital literacy skills, and cross-cultural learning. FGD interactions were recorded, transcribed, and analyzed to affirm or confirm earlier findings. Recurring themes and

meanings were extracted and interpreted from the two phases of data collection using the lens of the conceptual framework described in the next section.

*Conceptual Framework*

We looked into the phenomenon utilizing a combination of two lenses. One was through the lens of the COIL Program learning and teaching paradigm and the second was through the lens of ASCD's Globally Competent Learning Continuum. The purpose was to investigate the level of success of the COIL Program objectives in the areas of collaborative learning, digital literacy and cross-cultural learning and to discover the opportunities that were realized or missed in the development of global competence among the PSTs who were enrolled in this binational class under the COIL Program of DLSU and ULSA.

Figure 1: *The COIL Program as a Way of Developing Global Competence in Teacher Disposition, Knowledge, and Skills* [1]
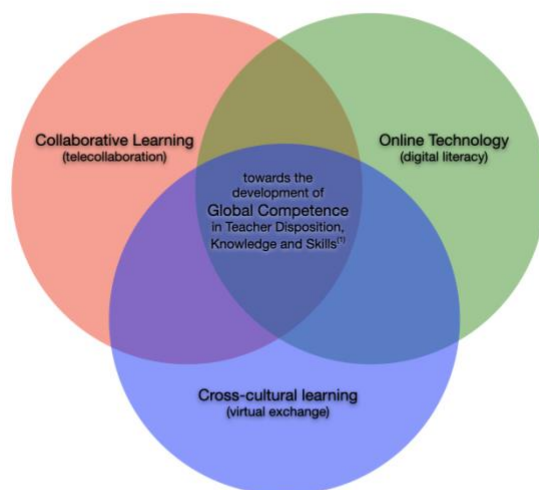


*Sources:* The COIL Program Paradigm & the Globally Competent Teaching Continuum

*Instruments*

To measure the level of success of the COIL Program objectives in the areas of collaborative learning, digital literacy and cross-cultural learning, we utilized a significant part of the questionnaire developed by the WILLIAM team that is used to assess the COIL Program implementation in Israel.[69] This first part of the questionnaire contains five questions to determine demographics and 26 questions requiring responses using the 5-point Likert scale

ranging from (1) not at all to (5) to a great extent or (1) strongly disagree to (5) strongly agree. This part of the questionnaire also has nine open-ended questions.

To determine the effect of the COIL Program on the development of global competence among the students, this research utilized a significant part of ASCD's Globally Competent Learning Continuum.[70] In this second part of the questionnaire, there were seven 5-point rubric questions. Before implementing the data collection, we subjected the questionnaire to inter-rater reliability and face validity tests.

*Participants*

The total population of participants, as previously noted, comprised six graduate school students from DLSU enrolled in an educational technology course and 14 undergraduate students from ULSA enrolled in a media for educational communication course. All students were PSTs who attended this binational COIL Program and, therefore, were qualified to participate in the survey. All 20 students were invited to participate in the research. Seventeen students answered the online questionnaire, and five students voluntarily joined the FGD.

*Data Collection*

Data were collected from May 2022 to June 2022. The questionnaire was sent to the students using the web-based survey Google Forms, and the students were asked to complete the questionnaire once they had agreed to participate in the research. The data collected from the questionnaire were used to inform the qualitative questions to be asked in the FGD. There were two students from the Philippines and three from Mexico, respectively, who were able to attend the one-hour FGD on 14 June 2022. The FGD was conducted online via Zoom by our third co-author,[71] a researcher in the Philippines who was not part of the COIL Program implementation. The first phase of the FGD consisted of participants updating each other about themselves and engaging in light chat. In the next phase, the group was instructed to respond to a wide range of questions, such as: "What helped you in collaborating with one another? What difficulties did you encounter in collaborating with one another? Elaborate on what technological aspects of online learning did you appreciate the most or did you find most troublesome?" The group was encouraged to speak freely about their experiences.

*Research Ethics*

The research was conducted in line with widely accepted ethical research standards. Participants joined the research on their own volition. All participants confirmed their voluntary involvement by clicking on the "I Accept" button of the Google Forms. Instructions were given to the participants at the beginning of the data collection regarding the research's purpose, procedures, the need for recording the focus group FGD, data privacy, confidentiality, and the right to withdraw participation at any time. Collected data will be discarded five years after the survey, whether the research is published or not.

**Results and Analysis**

The goals of this research are to evaluate whether the PSTs have achieved the COIL Program objectives on: (1) the development of skills in collaborative learning or telecollaboration, (2) use of online technology or digital literacy and cross-cultural learning brought about by a virtual exchange, and (3) investigation on the quality of global competence achieved by the PSTs through the COIL Program.

*Survey Questionnaire Results*

On the quantitative side, the demographics of the participants, the achievement of the COIL Program objectives on the students' skills development in collaborative learning or telecollaboration, use of online technology or digital literacy and cross-cultural learning brought about by a virtual exchange and the achievement of global competence were all represented by percentages or mean. Of the 17 students, four (24%) were from the Philippine university and the rest were from the Mexican university. Most of the students were females – only two (11%) out of 17 were males. Most students were aged between 16 and 25 years old, with only two (11%) of them at 26 years old or beyond. Three students (18%) said it was their first time attending a collaborative online international course of this nature. One student (6%) had experienced a similar course once, while two (11%) others said twice. Eleven students (65%) said they experienced a similar course at least three times. All four Philippine students (24%) were conversant in English, while five Mexican students (30%) claimed to be English proficient. The remaining eight Spanish students (47%) indicated that they did not speak English fluently.

*Appendix Three* (telecollaboration) shows the results of the questions related to the development of skills for collaborative learning.

The COIL Program goals of developing skills in collaborative learning – namely (1) interdisciplinary skills, (2) interdependence skills, (3) problem-solving skills, (4) leadership skills and (5) development of self-confidence – were achieved to a large extent. Not shown in *Appendix Three* are the result that show that the participants tended to remain neutral (3.00) when asked if they were concerned about their ability to collaborate with students from another country before they joined this course.

The two open-ended questions in this part of the questionnaire asked the participants to cite an instance of how they collaborated with their teams and how their teams worked collaboratively. In summary, the teams primarily collaborated online through virtual meetings. Through this medium, they chose topics to be discussed and exchanged information, creative insights, and solutions. They delegated tasks to individual members and integrated their practice fields into developing their proposed solutions.

The general perception of the participants is that they had increased their collaborative learning or telecollaboration skills through the COIL Program, as evidenced by the mean of 3.80 (to a large extent).

*Appendix Four* (digital literacy) shows the results of the questions related to the development of skills for online learning.

The COIL Program's goals on developing skills in online learning – namely (1) skills in using apps for online communication, (2) skills in researching online, (3) skills in creating content/media, (4) skills in giving online presentation, and (5) skills to work in a virtual environment – were achieved to a large extent. Not shown in *Appendix Four* are the results indicating that participants were unconcerned about their ability to use technology to collaborate with international students prior to taking this course (3.06).

The participants were also asked what computer software or mobile app/s they used most in this course. The common responses were Zoom, Google Suite, Canva, Canvas, Facebook, WhatsApp, Padlet, and email.

When asked what technological aspect/s of the COIL Program course they appreciated most, the participants, in summary, mentioned the following: collaborating, communicating, and connecting with other students from another country through video calls; being introduced to materials that develop their ability to maximize online learning delivery; and learning how to use Google apps. At least two participants expressed that the COIL Program's technological aspect allowed them to practice their English speaking skills.

On the other hand, the participants were also asked to express what technological aspect/s of the COIL Program course they found troublesome. Six of the participants said that they found nothing problematic. Others, however, pointed out that internet connection and time zone difference were somewhat troublesome.

The participants were also asked to suggest what technology could have been used in this course so that it would have become more effective. At least five participants mentioned that instant messaging groups (e.g., WhatsApp, Discord) could have been created to facilitate quick communication. Two suggested the use of educational game apps. Another two brought up the need to get hold of a premium subscription to Zoom to overcome the 40-minute limit of the free version of the app.

The general perception of the participants was that they had increased their skills in using online technology and digital literacy through the COIL Program, as evidenced by the mean of 3.88 (to a large extent).

*Appendix Five* (learning skills) shows the questions' results related to developing cross-cultural learning skills.

The COIL Program goals of developing cross-cultural learning skills – such as (1) cultural awareness skills, (2) cultural understanding skills, (3) engagement in shared multicultural space, (4) foreign language learning, and (5) community and interconnectedness – were achieved to a large extent. The participants strongly agreed that they gained awareness about the similarities and differences in cultures of their partner country and also became more aware of their connectedness with their course mates from the other country. Not shown in the table found in *Appendix Five* were the results indicating that the participants neither agreed nor disagreed when asked if they were concerned, before this course, about their abilities to understand another culture of students from a different country (3.35) or communicate in English (3.18). However,

the participants agreed they made new friends in this course (4.47). They also strongly agreed that they gained awareness of the similarities and differences in the culture of their partner country (4.88) and became more aware of their connectedness with their coursemates from other countries (4.53).

The general perception of the participants was that they had increased their skills in cross-cultural learning through a virtual exchange through the COIL Program, as evidenced by the mean of 4.40 (to a large extent).

Looking at the COIL Program in general, the students agreed (4.25 out of 5.00) that the coursework in this COIL Program was aligned with the objectives of the original course that they enrolled in at their home university. They would also like to experience similar cross-national collaborations in the future (4.41 out of 5.00).

When asked what general aspects of the COIL Program they appreciated most, the participants indicated that it was meeting new people from another country, learning about their culture, and working in collaboration. As to what the participants least liked about the COIL Program, they indicated that it had to do with lack of communication which could be traced to not having a good internet connection and time-zone differences. Lastly, the participants recommended extending the time for the COIL Program itself to allow for more interaction among students and not just focus on the projects to be completed.

*Appendix Six* (global competence skills) shows the results of the questions related to the development of global competence in teacher disposition, knowledge, and skills.

As per the improvement of the global competence skills among the participants, they indicated that the COIL Program has helped them develop in them to the point of being proficient in the following teacher dispositions, knowledge and skills: (1) empathy and valuing multiple perspectives, (2) commitment to promoting equity worldwide, (3) understanding of global conditions and current events, (4) understanding of the ways that the world is interconnected, (5) experiential understanding of multiple cultures, and (6) understanding of intercultural communication. The participants felt that they were only on the level of progressing when communicating in multiple languages.

The general perception of the participants was that they have developed their global competence skills through the COIL Program, as evidenced by the mean of 3.66 (proficient).

### *Focused Group Discussion Results*

A focus-group discussion (FGD) was held after the data from the questionnaire were collated and analyzed. The one-hour online sharing was recorded with permission from the participants. There was a total of five participants, two coming from the Philippine university and three coming from the Mexican university. A tool for captioning and transcribing (Microsoft Stream) was utilized to capture the conversations in the FGD.

Several themes from the transcription, such as collaborative learning, online learning, cross-cultural competence, and global competencies were used to categorize the participants' replies. These themes were also derived from the original questionnaire categories of questions.

The focus-group discussion participants appreciated social media and related services such as chats and Facebook Messenger; thus, they created Groups on Facebook. The teacher's detailed explanations were also considered beneficial. Participants utilized Google tools such as Google Docs and Google Slides. *"Social media, and related platforms like chats, messenger, Facebook. The instructions of the teacher helped a lot. We also used Google apps like Google docs and similar apps and Facebook group with both Filipino and Mexican members"* (*Participant 1*).

The participants reported feeling more at ease with one another after realizing they have more similarities than differences with their international counterparts. *"Knowing that we have more commonalities with Filipinos than what we knew made us more comfortable with each other"* (*Participant 4*).

The group's efforts were supported by effective communication, a great deal of respect, and enthusiasm. They were quite satisfied with these aspects of their work and their interactions with one another. *"There was a lot of respect, and good communication and participation in the group work"* (*Participant 5*).

However, they also faced challenges in the online course. Internet access issues were the most common complaint among both Mexicans and Filipinos. The dependability of their connections affected some of their interactions, particularly the synchronous ones. *"Internet connection was the main problem"* (*Participant 1*).

The participants from Mexico experienced difficulties with the language barrier, as some found it challenging to comprehend and speak English. Some participants from Mexico still needed to translate for their other Mexican classmates, thereby adding another layer of interaction. *"Language was a problem since not all understood English"* (*Participant 2), and "Another layer of translation was really a challenge"* (*Participant 4*).

They felt that coordination was more difficult because Mexico and the Philippines are in different time zones. Thus, scheduling activities constantly needed to be taken into account. *"Time zone difference was also a challenge"* (*Participant 4*).

However, they realized they were all PSTs, making at least part of their difficulties easier to endure. *"Knowing that we are all teachers also made it easy"* (*Participant 3*).

The FGD participants enumerated several technologies, like Zoom, Google applications, and Facebook messaging, which enabled them to be more productive; and thus, class requirements were completed more swiftly than usual. Participants valued that they were not required to relocate or travel to take this course. *"The tools gave us an opportunity to be more productive. Things were done more efficiently than we were used to. We didn't need to move and commute"* (*Participant 1*).

They were now, given the existing technologies, more aware of people from different nations, which was previously impossible. For them, the course widened their perspectives and horizons. *"The technology available made us become aware of people of another nationality which was impossible few years back. It expanded our scope and horizon"* (*Participant 2*).

They also realized that synchronous communication in class was not required. Since they were in different time zones, it was occasionally acceptable to reply to messages at a later time. *"We also do not need to communicate synchronously. Sometimes it is ok to respond to a message on a later time since we are time zones away from each other"* (*Participant 5*).

The participants believed, however, that the time allotted for introducing the COIL Program and the duration of the interactions were insufficient. *"The time frame was too short both for how COIL was introduced and the length of time of the interaction"* (*Participant 5*).

Time zone variations further complicated collaboration. *"Time zone differences added to the complexity of doing group work"* (*Participant 3*).

This led the participants to agree with the remark that cautious scheduling was essential. To make the course more significant, the participants shared their desire for the course to take on a longer duration. *"The scheduling and time zone was really a challenge, careful planning in the schedule is really key"* (*Participant 2*).

They also remarked that the class would have been more enjoyable if a face-to-face conversation had been made part of the class. *"It would have been more fun if there was a face-to-face interaction"* (*Participant 3*).

They believed informal, unstructured interactions, such as an "online hangout," would have made the experience more enjoyable. *"It would have been more fun if there were informal non-structured interactions like 'online hangout'"* (*Participant 4*).

As for the course requirements, the participants wished they wouild have been given the option to select the issues they would like to work on for them to be more engaged. *"It would have been more interesting if we were given the opportunity to choose the topics that we should work on as a group"* (*Participant 5*).

The FGD participants recalled that when they realized that Mexicans and Filipinos shared significant similarities, they felt more at ease and were able to break down previously-held barriers. *"… the realization that there were a lot of commonalities between Mexicans and Filipinos made it easier for us to break the barriers and become more comfortable"* (*Participant 1*).

They also observed that there was outstanding communication and a great deal of respect between the nationalities because of the careful course planning and preparation. *"There was a lot of preparation in terms of setting mindsets that we were collaborating with people of another nationality"* (*Participant 3*).

They acknowledged cultural diversity and the welcoming environment of the course. *"The friendly atmosphere helped a lot"* (*Participant 4*).

It was also mentioned that the participants bonded even before class started because of their shared Lasallian heritage and their careers in education. *"Knowing we are all Lasallians made us bond as early as the start of the class, and being in the field of education also helped a lot"* (*Participant 5*).

The participants also reiterated that it would have been preferable if they had had more time and space to themselves, away from teachers, so that they could have engaged in non-school-related conversations. *"It would be nicer if we were given more space and time on our own without our teachers so we can talk about non-school related things"* (*Participant 1*).

Another student encountered trouble interpreting portions of the course for non-native English-speaking classmates and indicated that assistance or preparation might have been provided earlier. *"The additional task of translating it to some classmates who do not speak English is definitely a challenge. There should at least be help or preparations on this"* (*Participant 2*).

The participants also advised that a better mix of nationalities could be used for groups next time. *"Mixed groupings in doing tasks would be nicer next time"* (*Participant 3*).

When asked what they would change about the COIL program if they had the opportunity, they said they would maintain everything and add more time for informal interaction. *"Do it the same and add more time for collaboration plus the informal interaction"* (*Participant 5*).

The FGD participants believed they could interpret one another's perspectives and benefit from one another's insights due to their knowledge of cross-cultural communication and individual exposure to diverse cultures. *"It allowed us to contextualize our responses and reactions to one another, thereby allowing us to learn from each other"* (*Participant 1*).

Moreover, they claimed to have understood non-English cultures and languages. *"It is about getting to know different cultures and learning languages other than English"* (*Participant 3*).

In addition, they learned to comprehend the interconnectivity of the world, current events, and global conditions, such as educational systems and country difficulties, better. *"We were asked to represent each culture, issues and the educational system"* (*Participant 2*).

They stated that their shared interest in education helped them develop different viewpoints since it gave them a sense of how the world is interconnected and gave them direct experience with various cultures. *"Something that we have in common is our interest in education which allowed us to have different views"* (*Participant 4*).

**Results and Analysis**

The findings of this study show that the PSTs perceived that they have significantly improved, through the COIL Program, their skills for collaborative learning or telecollaboration.

Interdisciplinary skills, interdependence skills, problem-solving skills, leadership skills and self-confidence were observed to have been developed to a large extent. Noting that the students were not overly concerned about collaborating with students from other countries, it is evident that they benefited from the COIL Program's central element of collaboration.

Another set of findings indicates that the PSTs deemed that they have greatly improved, through the COIL Program, the skills for online learning or digital literacy. Skills in using apps for online communication, skills in online research, skills in creating content or media, skills in presenting online, and skills in working virtually were perceived to have been developed to a large extent. The use of technology in the course was also not a cause of concern for the students at the start of the Program. Giving online presentations and working virtually received the highest rating. Within the context of lockdowns during the pandemic in both countries in the second quarter of 2021, the students may have gotten more used to presenting reports and working online.

Furthermore, another set of findings demonstrates that the PSTs perceived that they had developed skills in cross-cultural learning through their virtual exchanges. Skills in cultural awareness, cultural understanding, engaging in shared multicultural spaces, foreign language learning, and community and interconnectedness were deemed to have been enhanced to a large extent. It should be noted that the participants rated themselves as progressing in English language learning, albeit one of the lowest ratings. This is related to the worry that some Mexican students' classmates required a layer of English-to-Spanish translation. Some English-proficient Mexican students, as previously noted, spent some time explaining instructions to those who did not understand the language.

The experience and skills gained by the participants align with the COIL Program's objectives. The results of this study support the original COIL Program framework of Rubin[72] when the COIL practices began with the social sciences, humanities and languages and are now applied in the discipline related to technology and communication in education.

The same can also be said about the perceived impact of the COIL Program in developing the skills necessary for global competence. The study showed that the COIL Program increased the skills of the participants in empathy and valuing multiple perspectives, commitment to promoting equity worldwide, understanding of global conditions and current events, understanding of the ways that the world is interconnected, experiential understanding of multiple cultures, and understanding of intercultural communication. This result agrees with the recommendation of Guimarães & Finardi,[73] where they stated that a COIL program is a viable way to use online technologies to bring intercultural experiences into classrooms to give more students the chance to learn about the world in different settings.

It can be observed in the results that the seventh skill (communicate in multiple languages) was only slightly developed, as the COIL Program itself was not a class to teach and learn a language. While this item garnered the lowest rating compared to the other six skills, it is clear that the participants still perceived that the COIL Program helped them progress in this area. This is congruent with the findings of Azizinezhad et al.[74] that cooperative learning significantly improved the oral communication ability and motivation of students learning English.

It can be noted that the most commonly experienced difficulties had to do with internet connectivity issues and time-zone differences (both of which were similar to the students' experiences in the study of Gray et al.[75]), short duration of the course (thus the need for the professors to allot enough time for meetings[76]), and difficulty in communicating in English for some of the Mexican students. As learning a different language involves some difficulty, the COIL Program allowed the Mexican students to hone their English speaking skills beyond textbook language and access generally English-proficient students from the Philippines, a situation similar to the findings of Ramirez-Marin et al.[77]

Using available social media apps such as Facebook Messenger, a meeting app commonly known as Zoom, and several productivity apps by Google Suite aided participants in achieving COIL Program objectives. The same study by Ramirez-Marin et al.[78] noted that the students also created a Facebook group to communicate with and get to know their classmates. The use of the Zoom meeting app became more ubiquitous during the pandemic period, and studies such as that of Charbonneau-Gowdy and Cechova,[79] with pre-service teachers, suggest new evidence that these students' confidence and increasing experience in utilizing e-learning approaches in an online distance learning context as an integral part of their current practicum and future in-service teaching have undergone significant positive changes. Among the students investigated by Ramirez-Marin et al.,[80] the Google Suite platform was shown to be advantageous.

The initial weeks of the IALU-sponsored COIL course, which were spent on getting to know each other and sharing the similarities and differences of cultures, were instrumental in developing connections between the two nationalities. In the study of Gray et al.,[81] they describe a COIL program where the students, during their first week of classes, were asked to share their answers to questions such as: *"What is special about the place you grew up in?"* and *"If someone were to visit your culture, what do they absolutely need to experience to get a true taste of it?"* In terms of other beneficial structures, synchronous meetings allowed participants to get inputs and instructions, whereas asynchronous meetings allowed them to meet with their teams and conduct research.

### *Limitations*

This investigation, withoute doubt, has limitations. It was initiated nearly a year after the conclusion of the COIL Program; and the original sample size was small (n=19), with 17 students responding to the online questionnaire. Because of English-language difficulties for some students, the Mexican students were gathered in a room where a staff member helped them to understand the questions posed orally in English.

Moreover, few people (n=5) agreed to attend the subsequent FGD. There were significantly more female respondents and Mexican students in the sample population. Consequently, this study cannot be generalized. Notably, neither the Mexican students in media for educational communication nor the Filipino students in educational technology were aware that the course they were enrolled in included an 8-week COIL program component.

### **Conclusion**

The study confirmed that the COIL Program model is an effective structure for enhancing PSTs' global competence, mainly through the skills the students acquired through collaborative learning, online learning, and cross-cultural learning. A more globalized world necessitates an increase in global competence. It highlighted the best feature of the COIL Program, which is the development of cross-cultural learning without the need for travel and the fact that it is a viable alternative to international student exposure should another pandemic-like global crisis occur.

This investigation has also revealed areas that can be improved for future COIL Program implementation. Before implementing a COIL Program, it is suggested that professors consider the possibility of administering a pre-test and a post-test to determine much more accurately the development of students' skills in the areas of collaborative learning, online learning, cross-cultural learning, and global competence. This might facilitate the acquisition of deeper insights in the future. As to how the COIL Program will be implemented in the future and withing the IALU network of universities, the participants provided several suggestions, including adding more weeks to the total timeframe of the program, carefully planning the class schedule of activities due to time zones, considering more free-flowing synchronous activities to allow more students to "hangout online," giving the students more freedom to choose the topics that they would like to research, and creating the right mix of students. Finally, as an IALU project, the deepening of the connection between the two sets of Lasallian university students might be explored further.

### *Recommendations*

While the following issues did not surface either in responses to the questionnaire or the FGD, it may be worthwhile to investigate them based on the other COIL Program implementations that we derived from the literature review, such as free-riding students and unequal participation of students due to online access,[82] low institutional support for the Program,[83] and finally, misalignment of the course with academic, cultural practices and student buy-in.[84]

**Appendix One**: *Collaborative Online International Learning Philippine-Mexico Syllabus*

| Weeks | Stages | Specific Objectives | Activities | Student Outputs | Technology Platforms |
|---|---|---|---|---|---|
| Week 0<br><br>*Personal Introduction (asynchronous)* | Stage 1:<br><br>Ice-breaker | Generate awareness and excitement for the COIL program. Become comfortable with sharing insights and ideas. | Self-introduction | A one-minute online video | Flipgrid |
| Week 1<br><br>*Introduction of Professors and Syllabus (synchronous)* | Stage 1:<br><br>Ice-breaker | Become familiar with each other, the plans, and the objectives of the COIL Program. | Group sharing and lecture | None | Zoom, Flipgrid, and Facebook |
| Week 2<br><br>*Country Culture Introduction (synchronous)* | Stage 1:<br><br>Ice-breaker | Learn more about each country's culture.<br><br>Become friends. | Group sharing | A table of Similarities and Differences between the Cultures of the Two Countries | Zoom, Canva |
| Week 3<br><br>*Webinar with UN SDG Specialists (synchronous)* | Stage 2:<br><br>Comparison and Analysis | Be familiar with some of the UN SDG challenges that each country faces.<br><br>Choose the SDG Challenge for the COIL | Lecture and team meetings | A paper responding to the initial question of what and why an SDG was chosen. | Zoom |

| | | Team to work on. | | | |
|---|---|---|---|---|---|
| Week 4<br><br>*Research<br>(asynchronous)* | Stage 2:<br><br>Comparison and Analysis | Gather more information about the specific UN SDG, identify the problem, and choose a possible project design or solution. | Team meetings | Research Data | online resources |
| Week 5<br><br>*Research<br>(asynchronous)* | Stage 3:<br><br>Collaboration | Apply knowledge gained from research to propose solutions that may help contribute to the achievement of the chosen UN SDG. | Team meetings | Draft slide deck for a pitch presentation | MS PowerPoint, Apple Keynote, online resources |
| Week 6<br><br>*Research<br>(asynchronous)* | Stage 3:<br><br>Collaboration | Explain the proposals to the professors, other teams convincingly, and guests. | Pitch presentations | Slide deck for a pitch presentation | MS PowerPoint, Apple Keynote, online resources |
| Week 7<br><br>*Closure<br>(synchronous)* | Stage 4:<br><br>Celebration | Close the experience.<br><br>Receive attendance certificates. | Group sharing | Cultural presentations | Zoom |

**Appendix Two**: *Globally Competent Learning Continuum*

**Teacher Dispositions**

| ELEMENT | Nascent | Beginning | Progressing | Proficient | Advanced |
|---|---|---|---|---|---|
| **1. Empathy and valuing multiple perspectives** | I have not yet explored how my personal beliefs have shaped my worldview. | I can identify my personal beliefs and experiences and recognize how they shape my view of the world. I recognize that I might hold stereotypes. | I understand that my beliefs and experiences are not universally shared. I can identify the influences that shape how others and I view the world. I am willing to explore the experiences and perspectives of people who challenge my beliefs. | I recognize biases and limitations of my own perspective and those of others' perspectives. I recognize how my personal beliefs influence my decisions as a teacher. I empathize by seeking to understand the perspectives of others. | I challenge my personal assumptions to understand viewpoints that differ from my own. I value diverse perspectives, including those that challenge my own. |
| **2. Commitment to promoting equity worldwide** | I have not yet considered local and global inequities. | I care about the well-being of others. I recognize that inequities exist locally and globally (e.g., poverty and discrimination). | I understand that there are barriers to equity locally and globally. I seek opportunities to contribute to efforts to address inequities. | I engage in opportunities that address particular issues of local and/or global inequity (e.g., poverty and discrimination). I take responsibility for helping my | I actively seek to understand why inequities exist and challenge those underlying causes. I lead students and others in my school to act on issues of equity locally and globally. |

| Teacher Knowledge | | | | | |
| --- | --- | --- | --- | --- | --- |
| **ELEMENT** | **Nascent** | **Beginning** | **Progressing** | **Proficient** | **Advanced** |
| **3. Understanding of global conditions and current events** | I do not yet have knowledge of world conditions and current events. | I have a basic understanding of world geography. I have a basic understanding of current local and/or global events. | I can articulate geographical, historical political, economic, social and/or cultural influences on current events. I can access multiple resources that portray current events. | I seek out multiple sources to understand contrasting perspectives on an issue. I stay informed on current local and global issues. | I regularly seek resources from varied perspectives and opportunities to stay informed on local and global issues. I think critically about the potential impact of current events on future conditions, both locally and globally. |
| **4. Understanding of the ways that the world is interconnected** | I have not yet considered the ways the world is interconnected. | I recognize that our world is interconnected and interdependent (e.g., economically, socially, culturally, and environmentally). I recognize that the ways in which the world is | I understand ways that a global issue impacts my local context (including myself, my students, and my local community). I understand ways that a global issue impacts cultures or nations aside | I can explain ways that global issues impact my local context and individuals in other nations. I can explain global influences on local issues and local | I can critically analyze ways that global interconnectedness contributes to inequities within and between nations. I can explain how actions I take at the local, national, or international level address |

| | | | | | |
|---|---|---|---|---|---|
| | interconnected are constantly changing. | from my own. | influences on global issues. | inequities related to our interconnected world. | |

| | | | | | |
|---|---|---|---|---|---|
| **5. Experiential understanding of multiple cultures** | I have not yet reflected on my own cultural values and norms. I have not yet considered experiencing other cultures. | I am aware of my own cultural practices, values, and norms in relation to other cultures. I am interested in experiencing other cultures. | I understand differences in practices, values, and norms across cultures. I understand that multiple perspectives exist within and across cultures. I seek opportunities to experience other cultures. | I demonstrate knowledge of various cultures through cultural immersion experiences (e.g., study abroad and local immersion). I reflect upon the immersion experience in relation to my own cultural constructs, perspectives, and educational practices. | I critically relate multiple cultural immersion experiences to each other and to my own perspectives and practices. I modify my educational practices and/or advocate for changing educational policies and practices based upon immersion experiences and understanding of multiple perspectives. |
| **6. Understanding of intercultural communication** | I am not yet familiar with cultural differences in communication. | I am aware that different cultures may have different ways of communicating (e.g., differences in language, gestures, and norms for communicating). | I can identify strategies that enhance intercultural communication. I can explain the relationship between language, communication, and identity. | I can use strategies to effectively navigate intercultural interactions. I understand that learning languages has social, emotional, and cognitive aspects. | I critically reflect on how particular languages and modes of communication are valued more than others and the effect that this has on identity. I can help others navigate the social, emotional, and |

cognitive aspects of intercultural communication.

| | | | Teacher Skills | | |
|---|---|---|---|---|---|
| **ELEMENT** | **Nascent** | **Beginning** | **Progressing** | **Proficient** | **Advanced** |
| **7. Communicate in multiple languages** | I speak one language and have not yet pursued another | I am pursuing or have pursued a language other than my own. | I can have basic conversation in two languages (including my own). | I am proficient in at least two languages (including my own). I can effectively communicate with students and families in at least two languages. | I am fluent in at least two languages and seek opportunities to use them in schools and communities. |
| **8. Create a classroom environment that values diversity and global engagement** | I do not yet consider global issues or diverse perspectives and cultures in my classroom. | I discuss global engagement and valuing of diverse perspectives and cultures in my classroom. | I engage students in learning about other cultures by emphasizing the relevance of global issues to students' lives. I teach my students to respect diverse perspectives and cultures. My classroom contains resources that represent | I teach my students to respect and learn from diverse perspectives and cultures. I provide opportunities for students to collaboratively discuss global issues. I consistently encourage students to use resources in my classroom | I help my students develop a concern for global issues, an interest in learning more about diverse cultures, and a desire to take action. |

| | | | multiple global perspectives. | for global learning. | |
|---|---|---|---|---|---|
| **9. Integrate learning experiences for students that promote content-aligned explorations of the world** | I do not yet include global learning experiences aligned with content standards. | I can identify global learning experiences that align with content standards. | I integrate into my instruction global learning experiences aligned with my students' interests and content standards. | I regularly integrate real-world and challenging global learning experiences aligned with my students' interests and content standards. | I reflect on my students' global learning experiences and revise my teaching accordingly. I support the school community in integrating global learning experiences. |
| **10. Facilitate intercultural and international conversations that promote active listening, critical thinking, and perspective recognition** | I do not yet provide opportunities for students to converse with individuals from other cultures or nations. | I provide opportunities during the school year for students to converse with individuals from other cultures or nations. | I provide opportunities for students to converse with individuals from other cultures or nations, in which students demonstrate active listening, critical thinking, and/or perspective recognition. | I provide ongoing opportunities for students to converse with individuals from other cultures or nations, in which students demonstrate active listening, critical thinking, and perspective recognition. | My students initiate communication with individuals from across cultures and nations, in which they demonstrate active listening, critical thinking, and perspective recognition. |
| **11. Develop local, national, or international partnerships that provide** | I do not yet create opportunities for my students to communicat | I present students with an opportunity to participate in a global | I present students with opportunities for short-term | I develop local, national, and/or international long-term | I guide my students to develop local, national, and international partnerships, |

| real world contexts for global learning opportunities | e with local, national, or international organizations or individuals. | learning experience with local, national, or international organizations or individuals. | collaboration with local, national, or international organizations to learn about the world. | partnerships that allow my students to learn about the world with diverse communities. | direct their own communication with these partners, and develop their own global learning opportunities. |
|---|---|---|---|---|---|
| **12. Develop and use appropriate methods of inquiry to assess students' global competence development** | I am not yet familiar with how to assess students global competence development. | I am familiar with resources to assess students' global competence development. | I develop and use appropriate assessments of students' global competence development. I can provide students feedback and analyze students' global competence development. | I develop and use frequent, authentic, and differentiated assessments of students' global competence development. I can provide students with constructive feedback and analyze students' performance to inform subsequent instruction. | I guide students to evaluate their own global competence development. |

*Source:* The Globally Competent Teaching Continuum was first created in 2014 by J. M. Cain, J. Glazier, H. Parkhouse, and A. Tichnor-Wagner at the University of North Carolina at Chapel Hill.

**Appendix Three***: Collaborative Learning Skills or Telecollaboration (n=17)*

| Questions | Mean | Indicators |
|---|---|---|
| 1. To what extent did this course provide you with meaningful opportunity to collaborate on a project/assignment with students from other countries? | 3.76 | To a large extent |
| 2. To what extent did this course provide you with meaningful opportunity for discussions with students from other countries? | 3.76 | To a large extent |
| 3. To what extent did this course help increase your interdisciplinary* skills (*able to explore issues, problems, knowledge, and understanding which draw upon more than one discipline)? | 3.65 | To a large extent |
| 4. To what extent did this course help increase your interdependence* skills (*able to collaborate and work together to fulfill tasks as a member of a team)? | 4.12 | To a large extent |
| 5. To what extent did this course help increase your skills to solve problems? | 3.59 | To a large extent |
| 6. To what extent did this course help increase your leadership skills? | 3.71 | To a large extent |
| 7. To what extent did this course help increase your self-confidence? | 4.00 | To a large extent |
| **Collaborative Learning Skills or Telecollaboration Mean** | **3.80** | **To a large extent** |

**Appendix Four***: Use of Online Technology Skills or Digital Literacy (n=17)*

| Questions | Mean | Indicators |
|---|---|---|
| 1. To what extent did this course help increase your skills in using apps for online communication (such as Zoom, Google Meet, Whatsapp, Viber, Facetime, etc.)? | 3.82 | To a large extent |
| 2. To what extent did this course help increase your skills in using apps for researching online? | 3.59 | To a large extent |
| 3. To what extent did this course help increase your skills in creating content/media? | 3.82 | To a large extent |
| 4. To what extent did this course help increase your skills in giving a presentation online? | 4.12 | To a large extent |
| 5. To what extent did this course help increase your skills to work in a virtual environment? | 4.06 | To a large extent |
| **Online Learning Skills or Digital Literacy Mean** | **3.88** | **To a large extent** |

**Appendix Five**: *Cross-Cultural Learning Skills (n=17)*

| Questions | Mean | Indicators |
|---|---|---|
| 1. To what extent did this course help increase your cultural awareness* (*your understanding of your own culture)? | 4.59 | *To a large extent* |
| 2. To what extent did this course help increase your cultural understanding* (*your understanding of the culture of person from the other country)? | 4.59 | *To a large extent* |
| 3. To what extent did this course help increase your openness to be engaged in this multicultural space? | 4.65 | *To a large extent* |
| 4. To what extent did this course help increase your skills in learning a new language? | 3.71 | *To a large extent* |
| 5. To what extent did this course help increase your awareness of a global community? | 4.47 | *To a large extent* |
| **Cross-Cultural Learning Skills Mean** | **4.40** | *To a large extent* |

**Appendix Six**: *Global Competence in Teacher Disposition, Knowledge, and Skills (n=17)*

| Element | Mean | Indicators |
|---|---|---|
| 1. Empathy and valuing multiple perspectives | 4.00 | *Proficient* I recognize biases and limitations of my own perspective and those of others' perspectives. I recognize how my personal beliefs influence my decisions as a teacher. I empathize by seeking to understand the perspectives of others. |
| 2. Commitment to promoting equity worldwide | 3.71 | *Proficient* I engage in opportunities that address particular issues of local and/or global inequity (e.g., poverty and discrimination). I take responsibility for helping my students and others in my school to recognize inequities. |
| 3. Understanding of global conditions and current events | 3.53 | *Proficient* I seek out multiple sources to understand contrasting perspectives on an issue. I stay informed on current local and global issues. |
| 4. Understanding of the ways that the world is interconnected | 3.88 | *Proficient* I can explain ways that global issues impact my local context and individuals in other nations. I can explain global influences on local issues and local influences on global issues. |
| 5. Experiential understanding of multiple cultures | 3.65 | *Proficient* |

|   |   |   |
|---|---|---|
|   |   | I demonstrate knowledge of various cultures through cultural immersion experiences (e.g., study abroad and local immersion). I reflect upon the immersion experience in relation to my own cultural constructs, perspectives, and educational practices. |
| 6. Understanding of intercultural communication | 3.65 | *Proficient*<br>I can use strategies to effectively navigate intercultural interactions. I understand that learning languages has social, emotional, and cognitive aspects. |
| 7. Communicate in multiple languages | 3.18 | *Progressing*<br>I can have basic conversation in two languages (including my own). |
| **Global Competence Mean** | **3.66** | ***Proficient*** |

[1] Brother Dennis Magbanua, who earned a doctorate in educational management at De La Salle University-Dasmariñas, teaches educational technology at De La Salle University in Manila.

[2] Leonor Cremayer, who earned a master's degree in higher education, teaches media communication in education at Universidad La Salle in Mexico City.

[3] Rogelio dela Cruz, Jr., who earned a master's degree in learning and teaching at De La Salle University, teaches at De La Salle College of Saint Benilde in Manila.

[4] Vik Naidoo, "International Education: A Tertiary-Level Industry Update" in *Journal of Research in International Education* 5, #3 (2006), pages 323-345. https://doi.org/10.1177/1475240906069455

[5] Dorothea Rüland, "Internationalization, Digitalization, and COVID: A German Perspective" in *International Higher Education* 106 (2021), pages 11-12. https://doi.org/10.36197/IHE.2021.106.05

[6] José Antonio Quinteiro Goris, *How Will COVID-19 Affect International Academic Mobility?* (2020). Retrieved 1 February 2022 from https://www.iesalc.unesco.org/en/2020/06/26/how-will-covid-19-affect-international-academic-mobility/

[7] Burgit Strotmann and Claudia Kunschak, "Toward the Internationalization of Higher Education: Developing University Students' Intercultural Communicative Competence in Spain" in *Language and Intercultural Communication* (2022). https://doi.org/10.1080/14708477.2021.2018450

[8] Ariel Tichnor-Wagner, Hillary Parkhouse, Jocelyn Glazier, and J. Montana Cain, *Becoming a Globally Competent Teacher* (ASCD, 2019).

[9] Brother Dennis Magbanua.

[10] Carlos Coelho, personal communication, 8 July 2020.

[11] Paul Crowther, Michael Joris, Matthias Otten, Bengt Nilsson, Hanneke Teekens, and Bernd Wächter, "Internationalisation at Home: A Position Paper" in *European Association for International Education* (European Association for International Education, 2000). Retrieved March 24, 2022, from https://www.univ-catholille.fr/sites/default/files/Internationalisation-at-Home-A-Position-Paper.pdf

[12] Marzell I. Gray, Abimbola Asojo, Jeff Lindgren, Daniel Nolan, and Amy Versnik Nowak, "COIL: A Global Experience for Everyone" in *Journal of Higher Education Theory and Practice* 21 (2021), pages 64-79.

[13] Leonor Creymayer.

[14] A. O. Asojo, Y. Kartishkina, D. Amole, and B. Jaiyeoba, "Multicultural Learning and Experiences in Design through the Collaborative Online International Learning (COIL) Framework" in *Journal of Teaching and Learning with Technology* 8 (2019), pages 5-3. https://doi.org/doi:10.14434/jotlt.v8i1.26748

[15] Jon Rubin, "Embedding Collaborative Online International Learning (COIL) at Higher Education Institutions: An Evolutionary Overview with Exemplars" in *Internationalization of Higher Education* 2 (2017), pages 27-44. Retrieved 17 February 2022 from https://tinyurl.com/y69eashm

[16] Hans de Wit, "COIL – Virtual Mobility without Commercialization" in *University World News* (2013). Retrieved 9 February 2022 from https://www.universityworldnews.com/post.php?story=20130528175741647

[17] *The 17 Goals | Sustainable Development* (United Nations, Department of Economic and Social Affairs, n.d.). Retrieved 1 February 2022 from https://sdgs.un.org/goals.

[18] O. P. Meza, personal communication, 17 November 2021.

[19] Asojo et al., "Multicultural Learning and Experiences in Design through the COIL Framework"; de Wit, "COIL – Virtual Mobility without Commercialization"; and Rubin, "Embedding COIL at Higher Education Institutions."

[20] Lynette Jacobs, Katherine Wimpeny, Liza-Mari Mitchell, Cornelius Hagenmeier, J. Beelen, M. Hodges, V. George, A. DeWinter, C. Slambee, S. Obadire, A. Viviani, L. Sameuls, L. M. Jackson, R. Klamer, and N. Adam, "Adapting a Capacity-Development-in-Higher-Education Project: Doing, Being and Becoming Virtual Collaboration" in *Perspectives in Education* 39 (2021), pages 353-371.

[21] E. Dante Suarez and A. M. Haduch, "Teaching Business with Internationally Built Teams" in *Journal of Teaching in International Business* 31, #4 (2020), pages 312-366. https://doi.org/10.1080/08975930.2020.1851625

[22] Suarez and Haduch, "Teaching Business with Internationally Built Teams."

[23] Gray et al., "COIL: A Global Experience for Everyone"; and Frank Ramírez-Marín, Lucero del Carmen Núñez-Figueroa, & Nicole Blair, "Collaborative Online International Learning: Language and Cross-Cultural Experiences of University Students" in *Matices en Lenguas Extranjeras* 14, #1 (2020), pages 118-162. https://doi.org/10.15446/male.v14n1.92144.

[24] SUNY COIL Center, *Welcome* (SUNY, n.d.). Retrieved 1 February 2022 from https://coil.suny.edu

[25] Elizabeth F. Barkley, Claire H. Major, and K. Patricia Cross, *Collaborative Learning Techniques*, 2nd edition (John Wiley & Sons, 2014), pages 29-30.

[26] Dorothy Chun, "Language and Culture Learning in Higher Education via Telecollaboration" in *Pedagogies: An International Journal* 10, #1 (2015), pages 5-21. https://doi.org/10.1080/1554480X.2014.999775; and E. Y. Çiftçi and P. Savaş, "The Role of Telecollaboration in Language and Intercultural Learning: A Synthesis of Studies Published between 2010 and 2015" in *ReCALL: The Journal of EUROCALL* 30, #3 (2018), 278-298.

[27] SUNY COIL Center, *Welcome*.

[28] O. P. Meza, personal communication, 22 February 2022.

[29] R. J. Ellis, "Problems May Cut Right across the Borders: Why We Cannot Do without Interdisciplinarity" in *Interdisciplinary Learning and Teaching in Higher Education: Theory and Practice* by Balasubramanyam Chandramohan & Stephen Fallows, editors (Routledge, 2009), page 3.

[30] Suarez & Haduch, "Teaching Business with Internationally Built Teams," page 313.

[31] Greg Stewart and Murray Barrick, "Team Structure and Performance: Assessing the Mediating Role of Intrateam Process and the Moderating Role of Task Type" in *Academy of Management Journal* 43, #2 (2000), pages 135-148. https://doi.org/10.2307/1556372

[32] J. M. De La Torres-Ruiz and J. A. Aragon-Correa, "Interdependence between Best Team Members and Their Teammates" in *International Journal of Manpower* 34, #5 (2013), pages 552–567. https://doi.org/10.1108/IJM-06-2013-0121

[33] Suarez & Haduch, "Teaching Business with Internationally Built Teams."

[34] Dirk Ifenthaler, Pedro Isaías, J. Michael Spector, Kinshuk, and Demetrios G. Sampson, *Multiple Perspectives on Problem Solving and Learning in the Digital Age* (Springer, 2010). https://doi.org/10.1007/978-1-4419-7612-3

[35] Renee Morrison, "Don't 'Just Google It': 3 Ways Students Can Get the Most from Searching Online" in *The Conversation* (2022). Retrieved 18 February 2022 from https://theconversation.com/dont-just-google-it-3-ways-students-can-get-the-most-from-searching-online-116519

[36] A. Geyer, J. Putz, and K. Mistra, "The Effect of Short-Term Study abroad Experience on American Students' Leadership Skills and Career Aspirations" in *The International Journal of Educational Management* 31, #5 (2017), pages 1042-1053. https://doi.org/10.1108/IJEM-10-2016-0203

[37] Joanne Lyubovnikova, Alison Legood, Nicola Turner, and Argyro Mamakouka, "How Authentic Leadership Influences Team Performance: The Mediating Role of Team Reflexivity" in *Journal of Business Ethics* 141, #1 (2017), pages 59-70. https://doi.org/10.1007/s10551-015-2692-3

[38] Ruth H. Axelrod, "Leadership and Self-Confidence" in *Leadership Today*, edited by Joan Marques and Satinder Dhiman (Springer, 2017), pages 297-313.

[39] Roland Bénabou and Jean Tirole, (2002). "Self-Confidence and Personal Motivation" in *Quarterly Journal of Economics* 117, #3 (2002), pages 871-915. https://doi.org/doi-org.dlsu.idm.oclc.org/10.1162/003355302760193913

[40] Suarez & Haduch, "Teaching Business with Internationally Built Teams."

[41] Paul A. Gilster, *Digital Literacy* (Wiley, 1997).

[42] Isto Huvila, *Information Services and Digital Literacy: In Search of the Boundaries of Knowing* (Chandos Publishing, 2012).

[43] O. P. Meza, personal communication, 22 February 2022.

[44] Simon Kemp, *Report: Most Important Data on Digital Audiences during Coronavirus* (TNW | Growth-Quarters, 2020). Retrieved 20 February 2022 from https://thenextweb.com/news/report-most-important-data-on-digital-audiences-during-coronavirus; and J. Mander, C. Buckle, and S. Moran, "SOCIAL: GlobalWebIndex's Flagship Report on the Latest Trends in Social Media" in *Social Global Web Index* (2020). Retrieved 20 February 2022 from https://amai.org/covid19/descargas/SocialGlobalWebIndex.pdf

[45] Minh Hao Nguyen, Jonathan Gruber, Jaelle Fuchs, Will Marler, Amanda Hunsaker, and Eszter Hargittai, "Changes in Digital Communication during the COVID-19 Global Pandemic: Implications for Digital Inequality and Future Research in *SM+S: Social Media + Society,* 6, #3 (2020), pages 1-6. https://doi.org/10.1177/2056305120948255

[46] Hannes Weber, Dominik Becker, and Steffen Hillmert, "Information-Seeking Behavior and Academic Success in Higher Education: Which Search Strategies Matter for Grade Differences among University Students and How Does This Relevance Differ by Field of Study" in *The International Journal of Higher Education* 77, #4 (2019), pages 657-678. https://doi.org/10.1007/s10734-018-0296-4

[47] M. Whitney Olsen and Anne R. Diekema, "'I Just Wikipedia It': Information Behavior of First-Year Writing Students" in *American Society for Information Science and Technology* 60, #12 (2012), pages 1-10.

[48] Lane Perry, Lee Stoner, Max Schleser, Krystina R. Stoner, Daniel Wadsworth, Rachel Page, and Michael A. Tarrant, "Digital Media as a Reflective Tool: Creating Appropriate Spaces for Students to Become Introspective" in *Compare: A Journal of Comparative and International Education* 45, #2 (2015), pages 323-330. https://doi.org/10.1080/03057925.2014.993237

[49] Alisa A. Beyer, Catherine Gaze, and Julia Lazicki, "Comparing Students' Evaluations and Recall for Student Pecha Kucha and Powerpoint Presentations" in *Journal of Teaching and Learning with Technology* 1 #2 (2012), 26-42. Retrieved March 20, 2022, from https://scholarworks.iu.edu/journals/index.php/jotlt/article/view/3109

[50] Beyer et al., "Comparing Students' Evaluations and Recall for Student Pecha Kucha and Powerpoint Presentations"; and Michael A. Levin and Lori T. Peterson, "Use of Pecha Kucha in Marketing Students Presentations" in *Marketing Education Review* 23, #1 (2013), pages 59-64. https://doi.org/10.2753/MER1052-8008230110

[51] Jenny McDougall and Helen Holden, "The Silence about Oral Presentation Skills in Distance and Online Education" in *Open Learning: The Journal of Open, Distance and e-Learning* 32, # 2 (2017), pages 163-176. https://doi.org/10.1080/02680513.2017.1316187

[52] Organization for Economic Co-operation and Development, *Teleworking in the COVID-19 Pandemic: Trends and Prospects* (OECD, 2021). Retrieved February 23, 2022, from https://www.oecd.org/coronavirus/policy-responses/teleworking-in-the-covid-19-pandemic-trends-and-prospects-72a416b6/

[53] Patricia Costa, Ana Margarida Graça, Catarina Santos, Pedro Marques-Quinteiro, and Ramon Rico, "Teamworking Virtually: Business as Usual?" in *European Journal of Work and Organizational Psychology* 30 #5 (2021), pages 619-623. https://doi.org/10.1080/1359432X.2021.1936503

[54] Rubin, "Embedding COIL at Higher Education Institutions," as cited in Ramirez-Marin et al., "Collaborative Online International Learning: Language and Cross-Cultural Experiences of University Students."

[55] Simon L. Dolan and Kristina Marin Kawamura, *Cross Cultural Competence: A Field Guide for Developing Global Leaders and Managers* (Emerald Publishing Limited, 2015).

[56] Ramirez-Marin et al., "Collaborative Online International Learning: Language and Cross-Cultural Experiences of University Students."

[57] Felipe Furtado Guimarães and Kyria Rebeca Finardi, "Global Citizenship Education (GCE) in Internationalization: COIL as Alternative Thirdspace" in *Globalization, Societies and Education* 19 #5 (2021), pages 641-657. https://doi.org/10.1080/14767724.2021.1875808

[58] O. P. Meza, personal communication, 22 February 2022.

[59] Josepha Campinha-Bacote, "The Process of Cultural Competence in the Delivery of Healthcare Services: A Model of Care" in *Journal of Transcultural Nursing* 13 #3 (2002), pages 181-184. https://doi.org//10.1177/10459602013003003

[60] Bonnie Meekums, Cristen Wathen, and Rebecca Koltz, "Technology as a Bridge: Developing Intercultural Understanding through a Counselling Student Videoconference" in *British Journal of Guidance & Counselling* 45 #3 (2017), pages 238-247. https://doi.org/10.1080/03069885.2015.1135875

[61] Valentina Demchenko and Ekaterina Egorova, "The Formation of a Multicultural Space as a Real Necessity of Modern Education" in *EDP Sciences* (2021). https://doi.org/10.1051/e3sconf/202127312159

[62] Christina Isabelli-García, Jennifer Bown, John L. Plews, and Dan P. Dewey, "Language Learning and Study Abroad in *Language Teaching* 51, #4 (2018), pages 439-484. https://doi.org/10.1017/S026144481800023X

[63] Suarez & Haduch, "Teaching Business with Internationally Built Teams."

[64] Ramirez-Marin et al., "Collaborative Online International Learning: Language and Cross-Cultural Experiences of University Students."

[65] Jane Spiro, "Learning Interconnectedness: Internationalization through Engagement with One Another" in *Higher Education Quarterly* 68, #1 (2014), pages 65-64. https://doi.org/10.1111/hequ.12031

[66] Tichnor-Wagner et al., *Becoming a Globally Competent Teacher.*

[67] Tichnor-Wagner et al., *Becoming a Globally Competent Teacher.*

[68] John W. Creswell and Vicki L. Plano Clark, *Designing and Conducting Mixed Methods Research*, 3rd edition (SAGE Publications, 2017).

[69] Cf. WILLIAM Project (Welcome to Israel! Learning & Leading Internationalization at Home Assistance & Management Tool). https://william-erasmus.com

[70] Tichnor-Wagner et al., *Becoming a Globally Competent Teacher.*

[71] Rogelio dela Cruz, Jr.

[72] Rubin, "Embedding COIL at Higher Education Institutions."

[73] Guimarães and Finardi, "Global Citizenship Education in Internationalization."

[74] Masoud Azizinezhad, Masoud Hashemi, and Sohrab Darvishi, "Application of Cooperative Learning in EFL Classes to Enhance the Students' Language Learning" in *Procedia – Social and Behavioral Sciences* 93 (2013), pages 138-141. https://doi.org/10.1016/j.sbspro.2013.09.166

[75] Gray et al., "COIL: A Global Experience for Everyone."

[76] Suarez & Haduch, "Teaching Business with Internationally Built Teams."

[77] Ramirez-Marin et al., "Collaborative Online International Learning: Language and Cross-Cultural Experiences of University Students."

[78] Ramirez-Marin, et al., "Collaborative Online International Learning: Language and Cross-Cultural Experiences of University Students."

[79] Paula Charbonneau-Gowdy and Ivana Cechova, "Zoom-ing Out: The Impact of International Online Practicum Opportunities on Pre-Service Teachers' Development" in *Academic Conferences International Limited*. https://doi.org/10.34190/EEL.20.069

[80] Ramirez-Marin et al., "Collaborative Online International Learning: Language and Cross-Cultural Experiences of University Students."

[81] Gray et al. (2021), "COIL: A Global Experience for Everyone."

[82] Suarez & Haduch, "Teaching Business with Internationally Built Teams."

[83] Marilu Marcillo and Bendreff Desillus, "Collaborative Online International Learning Experience in Practice Opportunities and Challenges in *Journal of Technology Management & Innovation* 11, #1 (2016), pages 30-35. https://doi.org/10.4067/S0718-27242016000100005

[84] Carmen King Ramírez, "Influences of Academic Culture in Collaborative Online International Learning (COIL): Differences in Mexican and US Students' Reported Experiences" in *Foreign Language Annals* 53 (2020), pages 438-457. https://doi.org/10.1111/flan.12485