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

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Abstract: This study sought to determine the perceptions of seventeen pre-service teachers from two universities who participated in the Collaborative Online International Learning (COIL) Program regarding the development of their skills in telecollaboration, digital literacy, cross-cultural learning, and global competence. The COIL Program is an in-country international short-term study program that harnesses the global opportunities enabled by an online environment for students to experience cross-cultural education. The research used a combination of two lenses to look into the phenomenon: one through the lens of the COIL Program learning and teaching paradigm, and the other through the ASCD's Globally Competent Learning Continuum. A sequential mixed-method approach was adopted using an online questionnaire followed by a focus group discussion. The mean was analyzed on collected data from the online questionnaire, while qualitative data were transcribed, coded, and categorized to extract themes. The study confirmed that the COIL Program is an effective structure for enhancing the global competence of PSTs, primarily because of the skills acquired through collaborative learning, online learning, and cross-cultural learning. It highlighted the best aspect of the COIL Program, which is the development of cross-cultural learning without the need for travel, as well as the fact that it is a viable alternative to international student exposure in the event of pandemic-like crises in the future.

Key Words: collaborative online international learning, internationalization through virtual exchange, digital literacy, global competence, pandemic

1. INTRODUCTION

Internationalization has become a necessary response of higher education institutions (HEIs) to globalization. Almost all institutions of higher education, public and private, are fast becoming global players - a trend seen in a wide variety of other businesses (Naidoo, 2006). With the onset of the pandemic, all across the globe, higher education institutions were forced to switch from traditional classrooms to virtual classes almost overnight. The pandemic also abruptly halted students' international mobility, which prompted universities to explore internationalization through virtual exchange. Nevertheless, the need for the internationalization continues to grow as HEIs build on the robustness of their global character to provide more opportunities for students to develop their intercultural competency skills (Strotmann & Kunschak, 2022) or, interchangeably, their global competence (Tichnor-

Wagner et al., 2019).

The COIL Program (SUNY COIL Center, n.d.) 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. (2001) 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 (Gray et al., 2021). In this case, my co-author and I attended an International Association of Lasallian Universities (IALU) sponsored COIL Program training workshop to create an online collaborative program for our future students. The COIL Program encapsulates the four constitutive aspects of a proper virtual exchange in that (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 (de Wit, 2013).

The binational class comprised six graduate school students from a Lasallian university in the Philippines enrolled in an Educational Technology course, and 14 undergraduate students from a Lasallian university in Mexico enrolled in a Media for Educational Communication course. The students from Manila, Philippines joined the Zoom meeting at 8:00 PM in the Philippines while their counterparts in Mexico City joined at 7:00 AM on the same day due to the time difference. In summary, all the participants in the COIL Program were Pre-Service Teachers (PSTs). These PSTs attended one-hour weekly classes eight times from March 5, 2021, until May 25, 2021.

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) the 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?

It is significant to note that no research has been conducted on any IALU's version of the implementation of the COIL Program. (O.P. Meza, personal communication, November 17, 2021). Therefore, this study represents a pioneering attempt to evaluate the Program's implementation among members of the IALU.

2. METHODOLOGY

Using the mixed-methods explanatory sequential design (Creswell & Plano Clark, 2017), we evaluated whether the PSTs have 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. This survey determined 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 collection via the focus group discussion (FGD) method. The data collected from the FGD was then used to further explain and explore the participants' perceptions of how well they were able to develop collaborative learning or telecollaboration skills, their use of online technology and digital literacy skills, and how cross-cultural learning increased their global competence. The interaction in the FGD was recorded, transcribed and analyzed to confirm earlier quantitative findings. Recurring themes and meanings were then extracted and interpreted from the two phases of data collection using a combination of two lenses: the COIL Program learning and teaching paradigm, and the ASCD's Globally Competent Learning Continuum, as shown in Figure
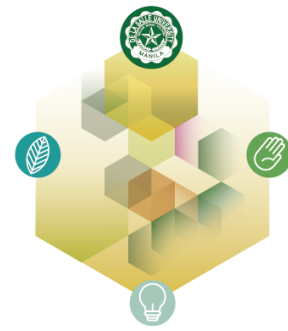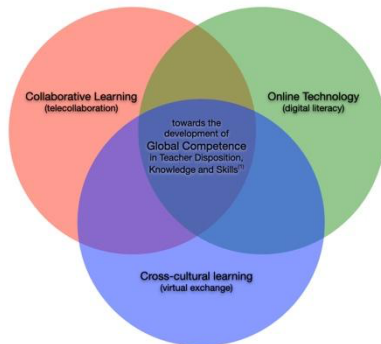
1.

Fig. 1: The COIL Program as a Way of Developing Global Competence in Teacher Disposition, Knowledge and Skills

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 (WILLIAM, 2022). This first part of the questionnaire contained five questions to determine demographics, 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 students, this research utilized a significant part of ASCD's Globally Competent Learning Continuum (Tichnor-Wagner et al., 2019). Since the participants in this research are PSTs, most have not formally taught in a classroom, as they were still in the process of being certified or licensed as a teacher. Therefore, in this treatment of the Globally Competent Learning Continuum, only parts of significant relevance to the participants were considered: the two Teacher Dispositions, the four Teacher Knowledge, and one Teacher Skill (communicate in multiple languages). Based on the detailed descriptions of the Continuum, the remaining skills can only be best measured when

these students are already teaching. 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.

Data was collected from May 2022 to June 2022. The questionnaire was sent to the students using the web-based survey tool 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 in the FGD. Two students from the Philippines and three from Mexico attended the one-hour FGD on June 14, 2022. The FGD was conducted online via Zoom by our third co-author, a researcher 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 step, 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 you found troublesome?" The group was encouraged to speak freely about their experiences. Microsoft Stream, a tool for captioning and transcribing was utilized to capture the conversations in the FGD. All 20 COIL Program students were invited to participate in the research. Seventeen students answered the online questionnaire, and five voluntarily joined the FGD.

3. RESULTS AND DISCUSSION

The demographics data, along with the achievement of the COIL Program objectives on the student's 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 quantitatively via percentages or mean. Of the 17 students, four (24%) were from a Philippine university, and the rest were from a Mexican university. Most of the students were females – only two out of 17 (11%) were males. Most students were aged between 16-25, with only two (11%) of them at 26 years old or older. Three students

(18%) said it was their first time attending a collaborative online international course of this nature. One student (6%) has experienced a similar course once, while two (11%) said that they have experienced this twice before. Eleven students (65%) said they had experienced an equivalent course at least thrice. All four Philippine students (24%) were fluent in English, while five Mexican students (30%) claimed to be proficient in English. The remaining eight Mexican students (47%) indicated they did not speak English fluently.

The findings of this study show that the general perception of the participants is that they have increased their collaborative learning or telecollaboration skills through the COIL Program, as evidenced by the mean of 3.80 (to a large extent) in the areas of interdisciplinary skills, interdependence skills, problem-solving skills, leadership skills and self-confidence. The result shows that the participants tended to remain neutral (mean = 3.00) when asked if they were concerned about their ability to collaborate with students from another country before they joined this course.

Another set of findings indicates that the participants have increased their skills in using online technology and digital literacy as evidenced by the mean of 3.88 (to a large extent) for the following areas: 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. The results also indicate that participants were unconcerned about their ability to use technology to collaborate with international students before taking this course (mean = 3.06).

Furthermore, another set of findings demonstrates the general perception of the participants that they have increased their skills in cross-cultural learning through a virtual exchange, as evidenced by the mean of 4.40 (to a large extent). The participants agreed (mean = 4.25) that the coursework in this COIL Program aligns with the objectives of the original course they enrolled in at their university. They would also like to experience similar cross-national collaborations in the future (mean = 4.41)

Lastly, the general perception of the participants is that they have developed their global competence

skills, as evidenced by the mean of 3.66 (Proficient). As per the improvement of the global competence skills among the participants, they indicated that the COIL Program has helped them develop themselves to the point of being proficient in the following teacher dispositions, knowledge, and skills: (1) empathy and valuing multiple perspectives (mean = 4.00), (2) commitment to promoting equity worldwide (mean = 3.71), (3) understanding of global conditions and current events (mean = 3.53), (4) understanding of the ways that the world is interconnected (mean = 3.88), (5) experiential understanding of multiple cultures (mean = 3.65) and (6) understanding of intercultural communication (mean = 3.65). On the other hand, the participants felt that they were only on the level of progressing when communicating in multiple languages (mean = 3.18).

Several themes from the FGD 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.

On the theme of collaborative learning, the structures or resources that helped the participants in achieving the COIL Program objectives were observed in the following: the 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. The participants reported feeling more at ease with one another after realizing they have more similarities than differences with their international counterparts. 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.

However, the participants also experienced common challenges in terms of collaboration. 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. 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. They felt coordination was more difficult because Mexico and the Philippines are in different time zones.

On the theme of online learning, the structures or resources that helped the participants in achieving the COIL Program objectives were observed in the following: the 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. The participants valued that they were not required to relocate or travel to take this course. They also realized that synchronous communication in class is not required. Since they are in different time zones, it is occasionally acceptable to reply to messages at a later time.

However, the participants also experienced common challenges in terms of online learning. The participants believed that the time allotted for introducing the COIL Program and the duration of the interactions were insufficient. To make the course more significant, the participants shared their desire for the course to take on a longer duration. Time zone variations further complicated collaboration. This led the participants to agree with the remark that cautious scheduling is essential. They also remarked that the class would have been more enjoyable if a face-to-face conversation had been made part of the class. They also believed informal, unstructured interactions, such as an "online hangout," would have made the experience more enjoyable.

On the theme of cross-cultural competence, the structures or resources that helped the participants in achieving the COIL Program objectives were observed in the following: when the 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. They also observed outstanding communication and a great deal of respect between the nationalities because of the careful course planning and preparation. They acknowledged cultural diversity and the welcoming environment of the course. It was also mentioned that

the participants bonded even before class started because of their shared Lasallian heritage and their careers in education. When asked what they would change about the COIL Program if they had the opportunity, they said to maintain everything and add more time for informal interactions. The participants believed they could interpret one another's perspectives and benefit from their insights due to their knowledge of cross-cultural communication and individual exposure to diverse cultures. Moreover, they claim to have understood non-English cultures and languages. They are now more aware of people from different nations, which was previously impossible given the existing technologies. For them, the course widened their perspectives and horizons. In addition, they learned better to comprehend the interconnectivity of the world, current events, and global conditions, such as educational systems and country difficulties. 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.

However, the participants also experienced common challenges in terms of cross-cultural competence. The participants 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. The participants also wished they could select the issues they would like to work on to be more engaged. Another student encountered trouble interpreting portions of the course for non-native English-speaking classmates, indicating that assistance or preparation could have been provided earlier. The participants also advised that a better mix of nationalities can be used for groups next time.

4. CONCLUSIONS

The study confirmed that the COIL Program is an effective structure for enhancing PSTs' global competence, mainly through the skills they 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 that it is a viable alternative to international student exposure should another pandemic-like crisis occur.

This investigation has limitations. It was initiated nearly a year after the conclusion of the COIL Program, and the original sample size was small (n=20), with 17 students responding to the online questionnaire. Because of English language difficulties for some of them, the Mexican students were gathered in a room where staff helped them to understand the English questions orally. Moreover, fewer 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 knew that the course they were enrolled in included an 8-week COIL Program component.

This investigation has also revealed areas that can be improved for future COIL Program implementation. Before implementing the Program, it is suggested that professors consider administering a pre-test and a post-test to determine much more accurately the development of students' skills in collaborative learning, online learning, cross-cultural learning, and global competence. As to how the COIL Program will be implemented in the future, 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.

5. ACKNOWLEDGMENTS

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