

COLLABORATIVE ONLINE INTERNATIONAL LEARNING IN A BUSINESS COURSE DURING AND POST THE COVID-19 PANDEMIC

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Abstract

During the COVID-19 pandemic, study abroad programs in the universities all over the world were exceptionally limited due to campus closures and travel restrictions. An innovative Collaborative Online International Learning (COIL) program was developed in a quantitative business core course. Students from Salem State University paired with students from Xi'an University of Posts and Communications to work on an assigned course project over a five-week period. Without traveling abroad, students had meaningful and valuable engagement with peers in another country. COIL is a practical way to prepare students for diversity and multi-culture while still helps fulfill academic program goals in their home universities. Additionally, COIL helps faculty leverage the utility of online learning technologies and structure the course in support of the social and emotional well-being of students during the COVID-19 pandemic. This COIL effort also has potential to show promising progress and fruitful results in business courses redesign. Courses in other disciplines could benefit from a properly designed COIL beyond the pandemic. The positive outcome of this COIL effort was supported by student survey. Survey result is discussed and future research direction is explored.

Key words: COVID, study abroad, student exchange, course redesign, international collaboration, diversity, multi-culture

1. INTRODUCTION AND LITERATURE

It has been almost three years since the World Health Organization (WHO) declared that the novel coronavirus (COVID-19) was a public health emergency of international concern in March 2021 (WHO, 2020). Every aspect of human life has been largely affected by this COVID-19 pandemic. During the pandemic, to control the spread of the virus, many countries restricted travel both inbound and outbound. The limited international travel affected almost all study abroad programs or student exchange programs in the U.S. universities and universities all over the world.

As the world is becoming more interconnected, students who study in all disciplines need to be prepared to communicate and work with people from diverse cultural backgrounds. Universities take the responsibility to help students develop intercultural skills by offering study abroad programs and student exchange programs. Unfortunately, during the COVID-19 pandemic, study abroad programs and student exchange programs were suspended. While the pandemic and travel restriction continue, there should not be a pause or stop of intercultural learning because students need that. It is also important to understand that the social and emotional well-being of students benefit from their international and multicultural learning experiences. To offer students the same or similar international and multicultural learning experiences during and beyond the pandemic becomes necessary.

Collaborative Online International Learning (COIL) is a pedagogical method to provide students international and multicultural learning experiences through digital technology without traveling abroad. COIL connects faculty with an international collaborator to develop a project that students use online tools to work on together across time zones, language differences, and geographical distance (SUNY COIL, 2021). Typically, students fully benefit from COIL come from geographical regions with different language and culture background. The recommended length for a COIL project is five weeks, although it can be as long as a semester or shorter depending on the project scope and course content. To obtain an effective COIL experience, three main components are necessary: pedagogy, technology, and cross-cultural learning (Asojo, et al., 2019).

There is usually a structured formal collaboration between two faculty members from two universities

in different geographical regions (Appiah-Kubi & Annan, 2020). Faculty members share responsibility in mentoring and assessing the students who participated in COIL. These faculty members teach similar or related courses, which makes it easy for collaboration purpose. A shared syllabus, course material, or outcomes with a common experiential learning tool could be implemented in COIL. An example of experiential learning tools includes course project that student can collaborate. Technology is a critical component of COIL. The faculty members share, explore, discuss, and decide which technology tools are to be used for course delivery, material sharing, collaboration, communication and assessment (Jie & Pearlman, 2018).

As previously mentioned, universities take the responsibility to help students develop intercultural skills by offering study abroad programs and student exchange programs. However, not every student can afford such program. Before COVID, one of the goals of COIL was to provide an opportunity for economically disadvantaged students who may not be able to participate in study abroad programs or student exchange programs to also benefit from an intercultural learning environment without traveling abroad (Appiah-Kubi & Annan, 2020). During the COVID-19 pandemic, because study abroad programs and student exchange programs were suspended, COIL became an excellent option to provide students with similar experience without traveling. Even though it is virtual, the experience is still highly beneficial to students' development in intercultural competence. COIL provides students with positive and engaging experience on social, cognitive, and emotional levels (Guth & Helm, 2017).

COIL has been successfully adopted in many disciplines over the years. A COIL experience for undergraduate nursing students at universities in the United States and the Philippines was designed and the students expressed valuing shared learning with peers in another country and reported gains in intercultural competence (De Castro, et al., 2019). An interdisciplinary (Dental Technology and Business Management) application of COIL confirmed the positive satisfaction of students and suggested COIL enriches the epistemological development of students by providing them with an opportunity to learn collaboratively with partners possessing cultural and professional perspectives different from their own (Vahed & Levine, 2019). A successful COIL program was offered in an International Business course between Saint Peter's University (USA) and Universidad La Salle (Mexico) (Marcillo-Gómez & Desilus, 2016). Students had the opportunity to engage with students located in a different country and learned about the differences between cultures through actual exposure to another culture without having to leave home. A more recent study redesigning a traditional study-abroad course – Automobile Engineering and Business into a fully online COIL course during the COVID-19 pandemic suggested that students were generally satisfied with the redesigned course (Liu & Shirley, 2021). This study also suggested that after the pandemic, a hybrid model could be adopted to enrich students' in-person study-abroad experience along with COIL-based online course components.

COIL projects can be challenging to implement, but with proper planning and reflection, the faculty can develop effective, manageable, and motivating learning experiences in the classroom. At Salem State University, the Center for International Education sponsored a Faculty Learning Community during the fall semester in 2020 to help faculty develop a COIL component to one of their courses. The COIL component would be implemented in the spring semester in 2021 with a partner at an international university. This paper documents a COIL component developed in ODS 333 Operations and Logistics Management, a quantitative business core course in the Bertolon School of Business. The COIL project was implemented in March 2021 for the length of five weeks. The COIL experience received a lot of positive feedback from students. It was encouraged that the COIL project could be implemented again in the future in more business courses beyond the pandemic.

2. METHODOLOGY

This COIL project brings students valuable international learning experience without traveling abroad. It encourages students to respect multicultural diversity and collaborate with foreign students for problem solving and task completion. More importantly, one goal of developing a COIL component in ODS 333 Operations and Logistics Management was to engage students in more social and interactive activities during the pandemic.

The project is a collaborative effort between Salem State University (USA) and Xi'an University of Posts and Communications (China). From Salem State University side, ODS 333 is the course that hosts the COIL component. This course is offered in an asynchronous online format with 63 students enrolled in three sections in spring 2021. The majority of students are juniors and seniors. The courses from Xi'an University of Posts and Communications participated in this project was Introduction to Management and Business Etiquette and Negotiation, out of which there are 65 students.

The start and end of semesters in the U.S. and in China are different. There are eight overlapping weeks in the spring semester of 2021. The COIL project was scheduled to launch at the end of March and lasted for 5 weeks. The U.S. faculty started the project preparation since September 2020 through the Faculty Learning Community at Salem State University. In the three-month preparation phase from September to December 2020, the U.S. faculty participated in 4 two-hour meetings with 11 other faculty members at Salem State University. These meetings helped these 12 faculties from different academic departments with many aspects of developing a COIL project including exploring COIL resources, establishing goals and objectives of the COIL component, engaging in the discussion of intercultural competence, and so on. Constant email exchanges discussing the details of this collaborated effort between the U.S. faculty and the faculty from China occurred during the project preparation period.

The COIL project started from the week of March 22 in 2021. The project length is 5 weeks. Students from both universities are randomly paired in 20 teams for collaboration purpose. Approximately, there are 3 students from Salem State University and 3 students from Xi'an University of Posts and Communications in each team. The contact information (name and email address) of each team member is shared within the team. Students were given the flexibility to choose how they communicate with each other through phone calls, emails, social media, video conferences, shared documents, and so on.

During the five-week period, students were given one assignment each week. Canvas is the Learning Management System (LMS) used at Salem State University. Assignments are posted on Canvas at the beginning of each week. Students from Salem State University submit their work through Canvas. Their COIL project is 20% of the total grade in ODS 333. Separate submission and evaluation (with different rubrics) were managed at Xi'an University of Posts and Communications. The details of all five assignments are provided in Appendix.

The purpose of the first two weeks' assignments was to give students an opportunity to introduce to each other in the team. This process was challenging because most students have never seen (in person or virtually) each other including students at Salem State University. To meet with students who do not share the same native language or culture background is new to many U.S. students. Meeting with someone remotely completely via traditional phone calls or texts, online technology, and social media is also new experience to many students. Time difference (12 hours) and banned technology (for example, Google and Facebook in China) added layers of challenges. The first week was given to students to get to know their team members from their own universities. The second week was designed for 20 teams to connect to all their team members from both Salem State University and Xi'an University of Posts and Communications.

The third and fourth weeks were the actual time students collaborate on course related assignments. Week 3 assignment was designed to emphasis ODS 333 course content – operations strategies and sustainability as well as intercultural experience and diversity. Students had a chance to learn more about operations strategies and sustainability from another country. Week 4 assignment was carefully designed to link course content with current event (COVID-19 pandemic). During the COVID-19 pandemic, food logistics (food delivery) had rapid growth both in the U.S. and China. Students were given the opportunity in Week 4 assignment to compare and contrast their operations, packaging, warehousing, competitive advantages, and so on. This provided students a rare chance to research because food delivery during the pandemic is still very new and under developing.

The last week of COIL project was to summarize their learnings in a report and to fill out an anonymous survey. Students' comments and suggestions are discussed with more details in the next two sections.

3. STUDENT FEEDBACK

In their submitted reports, students rated the COIL project very highly. For example, they described COIL as “eye opening”, “extremely unique”, “amazing learning opportunity”, “my favorite part of the semester”, “easily the coolest most interesting experience that I had in school”, “interesting and diverse way of learning...a lot of great educational purposes”, “wasn’t like anything that I have done before with a group”, “an interesting experience and definitely one of the most unique school assignments I’ve had to do”.

A lot of students enjoyed the COIL experience and hoped to have COIL again in the future. Selected comments are shown below.

- It is not only great for educational purposes, but also just for life experiences that I probably would never have been able to experience if I was not enrolled in this course.
- I am especially grateful that the school has such a project that allows students from other universities to work on the same project.
- (COIL is) a very exciting project for Salem State to incorporate into our courses. ... It is without a doubt a valuable experience and I am thankful I have had the opportunity.
- It also adds in a needed element of real, practical life instead of just classroom life into our education experience at Salem State. ... I hope I have another COIL project before I graduate!
- I look forward to seeing more group assignments like this in my future studies at Salem State.
- I do hope that eventually in my fall or spring semester I come across to something like this because how engaging it is.
- I would hope that more courses offer this same kind of COIL assignment to expose students to more environments outside of Salem State University.

4. CHALLENGES AND DISCUSSION

Based on students’ feedback, the COIL project was a success and has great potential to be implemented again in the future. Despite of the positive outcomes from the first trial of COIL, during the project preparation and implementation period, several challenges were discovered. Typically, a Zoom meeting can be scheduled for all students from both universities to meet for the first time. ODS 333 was taught asynchronously online so there was no Zoom class in this course. Due to the fact that there were over 120 students participated in this project, the Zoom meeting does not seem manageable to schedule or hold. It is also noted that the time difference between U.S. and China is 12 hours. Scheduling a Zoom meeting during an agreeable time period is not practical.

Second, Salem State University uses Canvas as the LMS, but Xi’an University of Posts and Communications does not. Enrolling students (from China) in the Canvas course of ODS 333 is challenging because of the license agreement at Salem State University. Additionally, the duration of the COIL project is five weeks and students from China were not taking the whole course of ODS 333. As a result, there is no common LMS used in this project.

Third, instead of requiring students using certain communication tools, students were given the flexibility to choose what tools they would like to use. This is partially because certain websites or tools are prohibited in China, such as Google, Facebook, and so on. The lack of some commonly used websites or tools inspired students to be creative. For example, students used WeChat, one of the most popular social media in China to communicate.

Fourth, because there is no common LMS used in this project, assignment submission was managed separately at Salem State University and Xi’an University of Posts and Communications. In this COIL project, students take different courses: ODS 333, Introduction to Management, and Business Etiquette

and Negotiation. Each course has its own goals and objectives so adopting the same rubric was not necessary or realistic. Therefore, evaluation was managed separately at both universities.

Fifth, during the last week of the project, one task for students to complete was an IRB approved anonymous survey. The application of IRB only includes the U.S. students as the objects. The faculty at Xi'an University of Posts and Communications developed a separate survey for students in China.

Sixth, due to the nature of the survey distributed and qualitative data collected, the result of this COIL effort was mainly discussed based on qualitative data. The promising result verified that COIL is an effective way to engage students in diversity and multi-culture. More COILs were planned to be implemented in the future. Additional assessment data would be collected based on quantitative survey data to further demonstrate the effectiveness of COIL.

Additionally, other challenges identified but not unique to this COIL project include language barriers for students whose first language is not English, culture differences, and personality differences.

In summary, the COIL project was a success. It brought students valuable international learning experience without traveling abroad. It encouraged students to respect multicultural diversity and collaborate with foreign students for problem solving and task completion. Also it engaged students in more social and interactive activities during the pandemic. The COIL project could be adopted in other business courses and courses in other disciplines beyond the pandemic.

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APPENDIX – Five Weekly Assignments

Week 1 Assignment 1: Introduce Yourself to Your Team Members from Your Home University

In this week, you will get to know your team members at Salem State University. You have the flexibility to choose your preferred way of communication, such as phone calls, emails, social media, video conferences, and shared documents. Please feel free to share some pictures or videos with each other. Below is a list of suggested talking points to help you facilitate this process. For submission purpose, please summarize what you have learned from your team members in a WORD document and upload the file on Canvas. Good luck everyone!

- Name, major, what year you are in at Salem State University.
- Which country/state and city you are from. Please share some detailed information of your country/state and city. Examples include geographical information, demographic information, history, latest development, and so on.
- Your family (pets included).
- Your job and work life (if any).
- Your hobby/hobbies.
- What is your daily routine?
- What's your favorite food, drink, book, movie, or sports, etc.?
- What do you want to do the most when the pandemic is over?
- What international travel or intercultural experience do you have (if any)?
- What do you plan to do this summer?

Week 2 Assignment 2: Introduce Each Other in Each Team

In this week, you will get to know your team members from Xi'an University of Posts and Communications (Xi'an, China). You have the flexibility to choose your preferred way of communication, such as phone calls, emails, social media, video conferences, and shared documents. Please feel free to share some pictures or videos with each other. Below is a list of suggested talking points to help you facilitate this process. For submission purpose, please summarize what you have learned from your team members in Xi'an University of Posts and Communications in a WORD document and upload the file on Canvas. Good luck everyone!

- Name, major, what year you are in at Salem State University.
- Which country/state and city you are from. Please share some detailed information of your country/state and city. Examples include geographical information, demographic information, history, latest development, and so on.
- Your family (pets included).
- Your job and work life (if any).
- Your hobby/hobbies.
- What is your daily routine?
- What's your favorite food, drink, book, movie, or sports, etc.?
- What do you want to do the most when the pandemic is over?
- What international travel or intercultural experience do you have (if any)?

- What do you plan to do this summer?

Week 3 Assignment 3: Team Work

In Schroeder and Goldstein's textbook (Operations Management in the Supply Chain: Decisions and Cases, 8th Edition by Roger Schroeder and Susan Goldstein. ISBN: 978-1260368109.), Chapter 2 Operations and Supply Chain Strategy, five operations strategic objectives are introduced: Cost, Quality, Delivery, Flexibility, and Sustainability. Sustainability is important in operations: (1) it minimizes or eliminates environmental impact of operations, and (2) it provides social and financial viability of the firm for future generations (Schroeder & Goldstein, 2020). The triple bottom line (three dimensions) of sustainability is environmental, social, and economic sustainability. Environmental sustainability may include:

- Curtailing air, water, landfill pollution
- Reducing energy consumption
- Minimizing transportation and total carbon footprint
- Working with suppliers to use recyclable and biodegradable packaging
- Incorporating product reuse, end-of-life return, recycling.

Think of examples (in your home countries) you have seen in person or in the media that illustrate how operations is closely tied to environmental sustainability and discuss with your team members. Each team chooses one example and write a report on what operations strategies were implemented to promote environmental sustainability and how was the outcome. Please make one submission per team.

Week 4 Assignment 4: Team Work

In Schroeder and Goldstein's textbook (Operations Management in the Supply Chain: Decisions and Cases, 8th Edition by Roger Schroeder and Susan Goldstein. ISBN: 978-1260368109.), Chapter 18 Global Logistics, logistics is defined as "Plans, implements, and controls the efficient, effective forward and reverse flows and storage of goods and related information between the point of origin and consumption in order to meet customer requirements". Critical logistics decisions include: what modes of transportation to use? what types of warehousing to use? where should factories and warehouses be located? should logistics be outsourced to third-party provider (3PL)? what is the strategic role of logistics in creating and supporting competitive advantage (Schroeder & Goldstein, 2020)?

During the COVID-19 pandemic, food logistics/delivery is experiencing rapid growth in the U.S. and China. Grubhub, DoorDash, Uber Eats, and Instacart are among popular food delivery services in the U.S.. Meituan Waimai, Ele.me, and Baidu Waimai are popular food delivery apps in China. There are similarities and differences of food delivery services in different countries. Please compare and contrast the following aspects (suggested but not limited to). Summarize your findings in a report and upload the file on Canvas. Please make one submission per team.

- How do they operate (for example, modes of transportation)?
- How do orders come in?
- How do they pack and storage food?
- Is there any warehousing? If so, where does it locate?
- Do they have in-house capacity (for example, fleet, people) or do they outsource to third party?
- What are the competitive advantages?
- Others.

Week 5 Assignment 5: Project Report

This is the last week of this COIL project. In this week, please complete the following three tasks. Thank you very much for your participation in COIL. Hope you enjoyed this COIL project and learned valuable lessons. I wish you the best of luck for the rest of the semester!

- summarize your intercultural and interdisciplinary experience in this project in a report;
- upload the report on Canvas for submission purpose;
- fill out an anonymous survey.