

The Experience of Mexican Female Students in the COIL Mexico-Colombia Project: Insights Into Intercultural Online Collaboration and Educational Exchange

Juana Beatriz Ortiz-Cienega, University of Guanajuato, Mexico
Monica Mondelo-Villasenor, University of Guanajuato, Mexico
Bertha Mondelo-Villasenor, University of Guanajuato, Mexico

The European Conference on Education 2026
Official Conference Proceedings

Abstract

The COIL Project between Guanajuato (Mexico) and Colombia originated as part of the institutional collaboration between the high schools of the University of Guanajuato and the Colegio Agustiniano Suba in Bogota, Colombia (UG, 2025). This study documents the experience of five female students from the city of Leon, Mexico, distinguished by their outstanding academic performance and strong collaborative skills. Throughout the development of the Collaborative Online International Learning (COIL) project, the students participated in a virtual master class and engaged in sustained interaction through social networks with peers and teachers from Bogota. These exchanges facilitated the sharing of practices related to environmental care applicable in both countries, as well as the dissemination of cultural traditions and regional celebrations. As a first approach Mexico contributed by presenting the Day of the Dead festivity, while Colombia enriched the collaboration by sharing diverse multicultural activities, including graphic arts, dance, visual arts, and other creative expressions. These exchanges enriched the experience of the Mexican students, who had never traveled abroad and now gained a broader perspective by interacting synchronously with young people of the same age in another country. This COIL project also underscored in the students the recognition that environmental, social, and cultural challenges often exhibit striking similarities across national boundaries. Furthermore, it demonstrated that meaningful international collaboration does not necessarily require substantial financial investment, but rather the commitment of both high schools to join efforts for mutual benefit.

Keywords: COIL, Mexico, Colombia, high school, female students

iafor

The International Academic Forum
www.iafor.org

Introduction

The Escuela de Nivel Medio Superior de Leon (ENMSL) was established in 1878, making it the oldest institution of its kind in the city of Leon, Mexico (Betancourt et al., 2026). At present, ENMSL enrolls 2,986 students, of whom 1,635 are women. A significant proportion of these female students express interest in pursuing careers in science, technology, engineering, and mathematics (STEM). This trend has encouraged ENMSL members to promote additional activities in the fields of science and engineering, as well as to seek opportunities for international collaboration whether in-person or virtual. One notable example is the partnership between the University of Guanajuato and the Colegio Agustiniiano Suba in Bogota, Colombia, through a Collaborative Online International Learning (COIL) project (UG, 2025).

This initiative provides ENMSL students, particularly those lacking the financial means to travel abroad, with the opportunity to engage with peers from other countries. It also fosters intercultural exchange and the sharing of diverse perspectives, thereby broadening students' global outlook and enhancing their understanding of contemporary international contexts.

Literature Review

Collaborative Online International Learning

The State University of New York Collaborative Online International Learning (SUNY COIL) (2025) describes the Collaborative Online International Learning (COIL) as *an approach that brings students and professors together across cultures to learn, discuss and collaborate as part of their class*. The State University of New York is the pioneer of the COIL virtual exchange model (SUNY COIL, 2025).

According to SUNY COIL (2025), professors design the experience, and students complete the activities designed. COIL can be created in any discipline, encourage active student learning and teamwork with an emphasis on cross-cultural interactions and understanding (SUNY COIL, 2025). A key aspect of COIL is collaboration between professors from two or more higher education institutions from different countries who connect, co-design and co-facilitate collaborative online learning group assignments for students from both institutions (Hackett et al., 2024).

As part of an existing course (SUNY COIL, 2025), the COIL component can take place more commonly as a module that lasts for several weeks during the course. The minimum recommended length for a COIL module is five weeks (SUNY COIL, 2025).

Methodology

In 2025, when the invitation to work on the COIL project was received, five female students were invited to participate in the ENMSL. They agreed to volunteer, as the project began after the semester was already underway, making it impossible to award a grade for the activity.

The students were between 15 and 16 years old and none of them had previously traveled abroad at that time.

Nevertheless, they expressed interest in visiting countries such as Japan, Sweden, Canada, the United States, Germany, Spain, Colombia, Italy, South Korea, France, or any nation in South America.

All the students intended to pursue careers in Science, Technology, Engineering, and Math fields and come from middle-class backgrounds.

The first COIL activity in which the female students participated consisted of a master class conducted via Google Meet. During this session, the teacher and students gathered in the laboratory of the school to design and construct a water filter using everyday household materials. One of the goals was to raise awareness about the scarcity of potable water in certain regions of both countries and how an affordable tool could be made available to low-income populations. The class was taught by a Colombian professor and was structured around the principles of design thinking. Mexican and Colombian students collaborated synchronously online for 90 minutes.

Following the master class, a WhatsApp group was created to enable students to share photographs and information about regional festivities, such as the Day of the Dead in Mexico. This group was kept private to allow the teacher to foster an environment in which the students could express themselves freely.

Additionally, a survey was designed using Microsoft Forms to assess the perspectives and experiences of the five participants. The survey remained open for a period of two days.

Results

During the master class, the students learn more about collaborative work. Before this activity, they had not had a formal laboratory class.

Figure 1

Working Together From the ENMSL



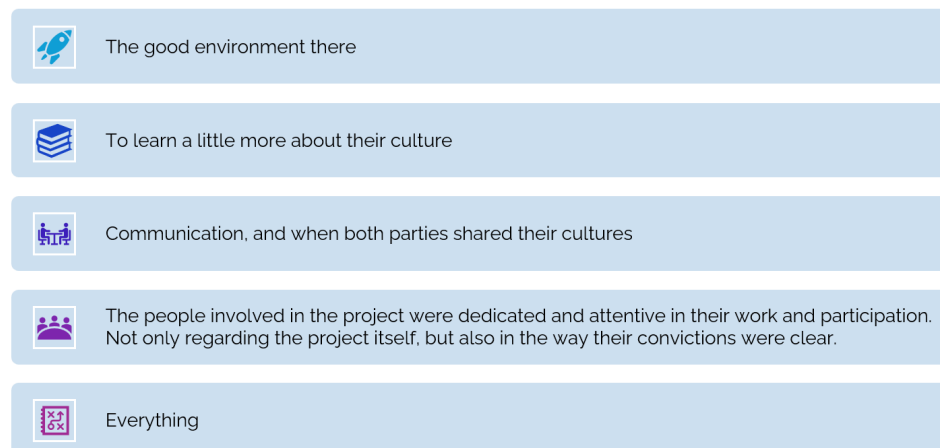
Note. Image by author.

Following the review of the survey results provided by Microsoft Forms, valuable data were obtained that offer an initial insight into the impact of the COIL project in the female students from the ENMSL.

As shown in Figure 2, the students said they had a nice time working with Colombian people.

Figure 2

What Did You Like Most About This COIL Project and the Interaction With Colombian People?

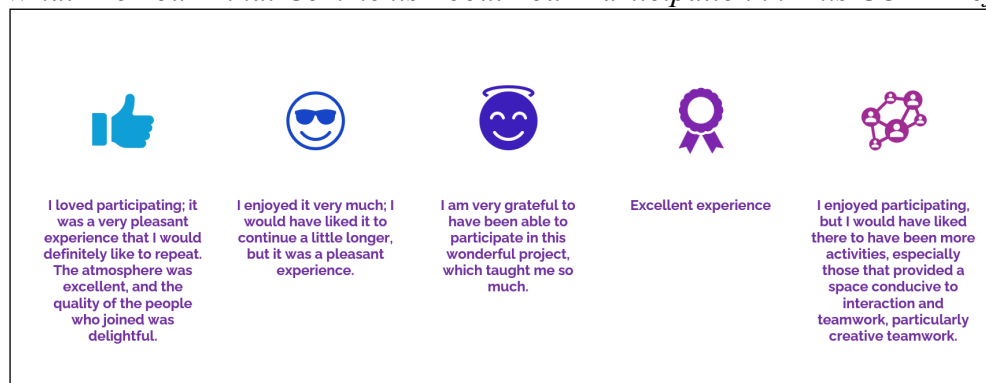


Note. Image by author.

The students also commented that they would have loved to continue working on future projects.

Figure 3

What Are Your Final Comments About Your Participation in This COIL Project?



Note. Image by author.

Conclusion

Unfortunately, the Mexico-Colombia COIL Project is no longer taking place due to the resignation of the head teacher at Colegio Agustiniiano Suba. However, the University of Guanajuato is still in contact with the rector of the Colombian institute, awaiting the resumption of the agreement and activities as soon as possible.

For the teacher from the Escuela de Nivel Medio de Leon (ENMSL), this learning experience has been immense: ranging from learning and implementing a new methodology to

witnessing the growth of students who worked with peers from another country. It also provided insight into the needs and working environment of fellow teachers in another Latin American country facing a situation similar to the one currently experienced in Mexico.

This shows that the global community is within reach, even to a public high school like the ENMSL. There is still a lot of work to be done, but as a first attempt it can be considered that the objective has been achieved since the students said they were satisfied with the results.

Now, the ENMSL is ready to continue with the COIL methodology and undertake a new project that will improve practices and continue innovating educationally.

Although COIL has been in existence for 20 years, it was the first time the COIL methodology was implemented in the entire history of the ENMSL.

Acknowledgements

To all the students who collaborated with great enthusiasm on this ENMSL's first COIL project. To the principal of the ENMSL, Mr. Benjamin Chavez for the facilities provided to the authors to carry out this project. To our beloved relatives for all their support.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author declares that Copilot, an AI virtual assistant, was used in proofreading and refining the language used in the manuscript. The usage was limited to correcting grammatical and spelling errors and rephrasing statements for accuracy and clarity. The author further declares that, apart from Copilot, no other AI or AI-assisted technologies have been used to generate content in writing the manuscript. The ideas, design, procedures, findings, analyses, and discussion are originally written and derived from careful and systematic conduct of the research.

References

- Betancourt, E., Nicasio, D. & Ramos, R. (2026). La Escuela Preparatoria de Leon: Patrimonio de la Universidad de Guanajuato [The high school of Leon: University of Guanajuato Heritage]. 15. University of Guanajuato.
- Hackett, S., Dawson, M., Janssen, J. & van Tartwijk1, J. (2024). Defining Collaborative Online International Learning (COIL) and Distinguishing it from Virtual Exchange. *TechTrends*, 68, 1078–1094.
- State University of New York (2025). SUNY COIL. <https://coil.suny.edu/>
- University of Guanajuato. (2025). Inician actividades académicas y culturales entre el CNMS y el Colegio Agustiniiano Suba, de Bogotá. [Academic and cultural activities begin between the CNMS and the Colegio Agustiniiano Suba in Bogota.] <https://ugto.mx/noticias/quehacer-institucional/20287-inician-actividades-academicas-y-culturales-entre-el-cnms-y-el-colegio-agustiniano-suba-de-bogota>

Contact email: jb.ortiz@ugto.mx