INTERNATIONALIZATION OF THE CURRICULUM THROUGH VIRTUAL MOBILITY

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Abstract: Since the COVID-19 pandemic and the adaptations implemented to deal with it, education in general and higher education in particular have undergone a revolution with the widespread adoption of virtual tools as a means of carrying out many activities that were previously done exclusively in person. One of the areas where the greatest use of these tools has been observed is in remote communication between institutions to carry out academic activities such as webinars, conferences, and congresses, among others. Thus, virtual mobility, through mirror classes and COIL projects, although already being explored by some pioneers, received a significant boost as a result of the aforementioned circumstances. In this regard, this paper presents a case study of the internalization of the curriculum through virtual mobility, specifically a collaborative project using the COIL methodology. It was carried out among final--year students at a public university in Paraguay and in the state of Texas in the United States of America. Through a comparative education project called "International Perspectives on the Curriculum," teacher training students from both universities were able to explore the curriculum taught in their local contexts and compare it with a third international context. According to the evaluations carried out by the students participating in the project, this experience allowed them not only to learn more about their own curricular context, but also to place it within a broader international context. This case has implications for teacher training in an increasingly globalized and technology-mediated world where critical thinking skills for sustainable development in transnational contexts are increasingly important and valued.

Keywords: virtual mobility, internationalization, curriculum

INTRODUCTION

The COVID-19 pandemic has had a profound impact on the way education is delivered and accessed around the world. With face-to-face learning disrupted due to health measures, educational institutions have had to quickly adopt virtual tools to ensure continuity of learning. This has also provided an opportunity to internationalize the curriculum through virtual collaborative experiences (Areces Martinez, et al., 2022; Beecroft and Bauer, 2022; Marinoni, 2019; O'Dowd, 2020; Ruiz, et. al., 2021). *Collaborative Online International Learning* (COIL) projects, in particular, have gained popularity as a means of promoting communication and intercultural understanding among students from different parts of the world (Angelini and Muñiz, 2021; Hauck and Müller-Hartmann, 2020).

Virtual mobility refers to the use of digital tools and platforms to facilitate international collaboration and learning experiences. Virtual exchanges, which involve synchronous or asynchronous online communication and collaboration between students from different countries, have been used for several years to promote dialogue and intercultural learning (Krasulia and Pistor, 2021; Lanham and Voskuil, 2022). COIL projects, meanwhile, involve collaborative projects between students from different countries that are integrated into the curriculum of the participating institutions (do Canto, et al., 2022; Rubin, 2017). This type of exchange, in addition to the recently adopted term "virtual exchange," has had several names that some have considered more appropriate, such as telecollaboration, online intercultural exchange, and online collaborative learning, among others (Doscher, et al., 2022; O'Dowd and Dooly, 2020).

The main feature of online collaborative projects (COIL) is that they consist of a module that is incorporated into an existing class at the home institution, so they do not require credit recognition at the institution with whi-

ch the exchange is taking place (Doscher, et al., 2022; Marinoni, 2019). This is an advantage for many, as it eliminates certain bureaucratic barriers associated with exchanges that require credit recognition. In addition, COIL projects can be used in any discipline and work well in interdisciplinary collaborations. They can last between five and fifteen weeks and include a graded activity in each participating class. They use any technology that facilitates learning objectives, encourage active student learning and teamwork, and emphasize intercultural interactions and understanding (Doscher, et al., 2022).

Thus, internationalizing the curriculum through virtual collaboration has numerous advantages (Rubin, 2017). First, it offers students the opportunity to interact with peers from different cultural backgrounds and learn about diverse perspectives (Gwillim and Karimova, 2021). This can help students develop intercultural communication skills and a global mindset, which are essential in a rapidly changing and interconnected world (Bassani and Buchem, 2019; O'Dowd and Dooly, 2020; Oviedo and Krimphove, 2022; Silla, et. al, 2020). In this way, it fosters global awareness and commitment among students to change their perspectives. Second, virtual collaboration can enhance student learning by providing access to resources, knowledge, and perspectives that may not be available locally (Beecroft and Bauer, 2022). For example, teachers and students in countries in the global south can access subscriptions through collaborating colleagues and students. Third, through technology and project-based learning, the development of digital skills, which are increasingly important in today's world, can be fostered. In addition, it increases motivation by promoting student-centered learning and the development of language and professional skills in students through authentic communication with native speakers (Hilliker, 2022; O'Dowd and O'Rourke, 2019; Potolia and Derivry-Plard, 2022; Salbego, et. al., 2021).

However, virtual collaboration also presents challenges, such as time differences, language barriers, and technological problems. For this reason, it is important for institutions to carefully design and implement virtual collaboration initiatives, taking into account best practices and lessons learned from previous experiences (Castillo, et al., 2021). Thus, there are a variety of synchronous and asynchronous modalities to consider, including email, forums, open collaborative platforms for mass use, synchronous or asynchronous chat, and videoconferencing. Teachers and students should adapt exchange activities according to the possibilities of the context (Doscher, et al., 2022; Marinoni, 2019).

As globalization continues to shape the world we live in, it is crucial that educational institutions prepare students for the challenges and opportunities of a globalized economy. Virtual mobility and the internationalization of the curriculum through virtual collaboration provide a means to achieve this goal (Castillo, et al., 2021; Goltara, et al., 2022). This paper aims to contribute to the ongoing dialogue on the value of curriculum internationalization through virtual collaboration, highlighting the benefits, challenges, and best practices associated with this approach. Ultimately, the paper aims to provide insights into how educational institutions can leverage technology to offer students a transformative learning experience that prepares them for success in a globalized world.

The case study presented in this paper examines a COIL project carried out between students in Paraguay and the United States. Through a comparative education project, master's students from both universities were able to explore the curriculum taught in their local contexts and compare it with a third international context. The evaluations submitted by the students participating in the project suggest that this experience allowed them not only to learn more about their own curricular context, but also to situate it in a broader international context.

METHOD

This section describes the methods used to carry out the comparative education project between students in the English language program at a public university in Paraguay and the science education program at a public university in Texas, USA. The "International Perspectives on Curriculum" project lasted six weeks and allowed students to explore and compare their local curriculum context with a third international context.

The project was carried out virtually through collaborative online international learning (COIL) using virtual communication tools such as videoconferencing, email, and social media. Before starting the project, students received an orientation session on the use of virtual communication tools and guidelines for intercultural communication. The experience was organized by three teachers, two in Texas and one in Paraguay, who worked with two groups of students, one in each context. Six work teams were formed with three students from Texas and two from Paraguay in each. Three preliminary preparation meetings were held to organize the activities to be carried out with the students. Once the experience began, it lasted six weeks and was carried out through synchronous and asynchronous activities.

First, a preliminary activity was carried out in which the Paraguayan students summarized and translated the Paraguayan education system's curriculum documents, as they are not available in English. This initial activity also included an asynchronous presentation through "I am from" poems, inspired by George Ella Lyon's poem "Where I'm From" (Christensen, 2001). The introductory poems were recorded and shared through the Flipgrid platform. Students were invited to watch their virtual classmates' videos and comment on the platform. Finally, there was a synchronous meeting of all students and teachers where they introduced themselves and their activities.

The project was divided into three phases. In the first phase, students were introduced to the comparative education project "International Perspectives on Curriculum" and asked to research and collect information about the curriculum taught in their local contexts. They were also provided with resources and guidance on comparative education. In the second phase, students were divided into mixed groups of Paraguayan and Texan students and asked to compare and contrast the curriculum taught in their local contexts. They were also asked to choose a third international context to research and analyze. In the third and final phase, students presented their findings and discussed their experiences through virtual presentations. Specifically, they collaborated to prepare a short presentation highlighting the benefits and challenges of participating in global virtual exchanges such as this one, specifically from their perspective as future educators (see Table 1).

Preliminary activity	Summary/translation of Paraguayan curriculum documents "I Am From" poems (Flipgrid) Presentations Synchronous meeting with the whole class
Week 1 Asynchronous Jamboard	Explore the education systems of Paraguay and Texas. Similarities Differences Questions
Week 2 Synchronous meetings	What did you think of last week's research? Choose another country to research
Week 3 Asynchronous Jamboard	Curriculum policies Curriculum change Curriculum development Curriculum organization Curriculum implementation Curriculum monitoring and evaluation
Weeks 4 and 5 Synchronous meetings	Collaborative presentations on Google: Compare the curriculum implemented in your country of study with the curriculum topics in Paraguay and the United States. Collaboratively create a short presentation discussing the benefits and challenges of participating in global virtual exchanges.

Table 1 Activities carried out during the exchange.

To evaluate the success of the project, students were asked to write reflective evaluations considering the overall experience, their intercultural communication skills, and their understanding of the international context. These reflections allowed students to comment on the strengths and weaknesses of the project and make suggestions for improvement. Based on the records of the activities and reflections, a qualitative content analysis was carried out using coding and categorization, which led to the identification of the following analytical categories regarding the possibilities offered by the experience. This project provided students with a greater understanding of international contexts, helped improve critical thinking and intercultural competence, and increased student motivation and commitment.

RESULTS

This section presents the results of a case study that aimed to internationalize the curriculum of teacher training students through a virtual collaborative experience. Below is an analysis of the data collected from the students' work and evaluations.

GREATER UNDERSTANDING OF THE INTERNATIONAL CONTEXT

The students highlighted that this project enabled them to gain a greater understanding of the curriculum in a global context. The comparative education project "International Perspectives on the Curriculum" allowed them to explore and compare the curriculum taught in their local contexts with a third international context, which gave them a broader understanding of the issues existing in different countries. They were able to compare recurring themes in different contexts, as well as the particularities of different regions and countries. For example, they found that bilingualism and multilingualism are present in many countries, albeit in different ways. Thus, students expressed that through this experience they were able to understand the curriculum in their particular context in a new light and appreciate the value of a more global perspective in their teaching practice.

IMPROVED CRITICAL THINKING SKILLS

Students reported that their critical thinking skills had improved as a result of the project. The project required students to analyze and compare curricula from different contexts, which gave them the opportunity to think critically about the content, methods, and purposes of education in different regions and countries. Thus, students highlighted that through this experience they were able to develop a deeper and more sophisticated understanding of the various aspects of the curriculum, as well as the factors that influence its successful development in a way that enables meaningful learning.

IMPROVED INTERCULTURAL COMPETENCE

The students stated that as a result of the project they were able to improve their intercultural competence, since the project carried out using the COIL methodology not only allowed them to interact with students from a different cultural background, but also required them to work collaboratively with them. This enabled them to develop their intercultural communication skills and their ability to work effectively in a diverse team composed of members from different cultural backgrounds. The students expressed

that this experience helped them appreciate the importance of cultural sensitivity in their teaching practice and develop strategies to work effectively with students and colleagues from diverse cultural and social backgrounds.

GREATER MOTIVATION AND COMMITMENT

Students emphasized that through the COIL project, their motivation and commitment to the curriculum increased, as it provided them with a more interactive and meaningful learning experience. They found the opportunity to work collaboratively with peers from another country more interesting and relevant than traditional classes or projects that simply involve their usual classmates. Students expressed that this experience helped them see the value of active learning and appreciate the benefits of collaboration and peer feedback in their learning process. The experience also helped them better contextualize the concepts learned during their courses, especially considering that these concepts can often be very abstract and intangible. Researching how the curriculum is implemented in diverse contexts allowed students to find greater relevance in the program content and motivated them to investigate further.

CONCLUSION

The results of this study demonstrate that virtual mobility, through projects using the COIL methodology, can be an effective way to internationalize the curriculum and promote critical thinking, intercultural competence, and motivation among students in the field of education. The study provides information on the potential benefits of curriculum internationalization through virtual collaboration, including the development of critical thinking skills and the promotion of sustainable development in transnational contexts. The project allowed students to explore and compare the curriculum in their local contexts with a third international context, which improved their understanding of it from a global perspective. In addition, through the project they had the opportunity to work collaboratively with peers from a different cultural background, which improved their intercultural competence and their ability to work effectively in a diverse and heterogeneous team.

The study has important implications for teacher training in an increasingly globalized and technology-mediated world, where critical thinking skills for sustainable development in transnational contexts are becoming increasingly important and valued. It highlights the potential of virtual collaboration to promote intercultural communication and understanding, and to improve student learning and digital skills. In conclusion, internationalizing the curriculum through virtual collaboration is a promising approach to preparing students for success in a globalized world. Virtual mobility, including virtual exchanges and COIL projects, can provide students with valuable intercultural learning experiences and promote the development of important skills and competencies. Although challenges exist, careful planning and implementation can help ensure the success of virtual collaboration initiatives. Overall, the methods used in this project provide a framework for internationalizing the curriculum through virtual collaborative experiences, which can be adapted and used by other institutions.

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