EmRede
Revista de Educação a Distância
UniRede

EmRede, v.12. 2025

Challenges for Collaborative Online International Learning and the use of Digital Technologies

Ana Paula Luiz dos Santos Aires
State University of Londrina (UEL), Londrina, Paraná, Brazil
aires.anapaulas@gmail.com

Diene Eire de Mello
State University of Londrina (UEL), Londrina, Paraná, Brazil
diene.eire@uel.br

Samantha Gonçalves Mancini Ramos
State University of Londrina (UEL), Londrina, Paraná, Brazil
saramos@uel.br

Abstract: The internationalization of higher education is a recurrent challenge in the Brazilian context. This study, of a qualitative and interpretative nature, points out the potential and limitations of Collaborative Online International Learning (COIL) and the investments needed for teacher training and for new forms of certification of disciplines and courses based on more flexible criteria.

Keywords: Internationalization; COIL; Technologies; Learning.

Desafios para a Aprendizagem Internacional Colaborativa On-line e o uso das Tecnologias Digitais

Resumo: A internacionalização do Ensino Superior tem sido um desafio recorrente no contexto brasileiro. Este estudo, de natureza qualitativa e interpretativista, aponta as potencialidades e limitações da Aprendizagem Internacional Colaborativa Online (COIL) e os investimentos necessários para a formação de docentes e para novas formas de certificação de disciplinas e cursos a partir de critérios mais flexíveis.

Palavras-chave: Internacionalização; COIL; Tecnologias; Aprendizagem.

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

EmRede
Revista de Educação a Distância

UniRede

Desafíos para el Aprendizaje Colaborativo Internacional Online y el uso de las Tecnologías Digitales

Resumen: La internacionalización de la enseñanza superior ha sido un desafío recurrente en Brasil. Este estudio, de carácter cualitativo e interpretativo, señala el potencial y las limitaciones del Aprendizaje Colaborativo Internacional Online (COIL) y las inversiones necesarias para la formación de profesores y nuevas formas de certificación de asignaturas y cursos basadas en criterios más flexibles.
Palabras clave: Internacionalización; COIL; Tecnologías; Aprendizaje.

Received on: 2024-07-04

Accepted on: 2024-12-11

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

EmRede
Revista de Educação a Distância
UniRede

1 INTRODUCTION

The internationalization of higher education institutions is a recurring challenge in the Brazilian context. Several questions permeate the definition of the term internationalization and its implementation, among them its objectives, benefits, results, the values related to the process, the agents, the beneficiaries, the positive consequences, the unexpected results, the political and financial implications, the sustainability, the conflicting interests, the homogenization, and hybridization of culture (Knight, 2005).

The launch of government initiatives such as Science without Borders[1], Language without Borders[2], and Capes Print[3] ended up defining internationalization indicators and practices that triggered reactive, generalized, disjointed, competitive, market-based, verticalized, and uncritical processes based on North American parameters (De Wit, 2011; Finardi; Guimarães, 2017).

Once the initial obstacles have been overcome, the internationalization currently being implemented in Brazilian Higher Education Institutions (HEIs) is critical, comprehensive, sustainable, articulated, inclusive, diverse, and collaborative. Recent studies point to new possibilities for internationalization in higher education, considering the promotion of paradigmatic changes in curricula, reviewing their origins, organization, and considering socio-cultural issues (Joseph, 2011; Welikmala, 2011). Likewise, it is important to understand that there is no single internationalization plan that fits all contexts and that such proposals must contemplate alternative realities (Piccin; Finardi, 2019; Stein; Andreoti, 2016).

The reasons why a university should be included in the global scenario must be questioned, taking into account its contextual specificities. Likewise, it is necessary to investigate the people who

[1] Research program created on July 26, 2011 to encourage academic training abroad, offering scientific initiation scholarships and encouraging scientific projects at universities of excellence in other countries and was discontinued in 2017.

[2]Program developed by the Ministry of Education in 2014 whose main objective was to encourage language learning in Brazil, in addition to providing major changes in the teaching of foreign languages in the country's universities. The program was discontinued by the MEC in 2019 and began to be implemented by National Association of Presidents of Federal Institutions of Higher Education (ANDIFES).

[3]The initiative, created in 2018, aims to: foster the construction, implementation and consolidation of strategic internationalization plans for the participating institutions in their prioritized areas of knowledge; stimulate the formation of international research networks with a view to improving the quality of academic production linked to postgraduate studies; expand actions to support internationalization in postgraduate studies at participating institutions; promote the mobility of faculty and students, with an emphasis on doctoral students, postdoctoral students and faculty abroad and from abroad to Brazil, linked to stricto sensu postgraduate programs with international cooperation; foster the transformation of participating institutions into an international environment; and integrate other CAPES support actions into the internationalization effort.

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

benefit from this process, otherwise, the objective will be limited only to scoring in rankings, without really focusing on the real needs of the people belonging to the university community (Lima; Maranhão, 2009).

In general terms, internationalization plans address the promotion of: a) in/out mobility and the generation, sharing, and re-creation/co-creation of knowledge; b) strategic bi-/multilateral cooperation through raising funds for research and innovation and improving the educational offer; c) qualification of the academic community through transversal projects in different areas of knowledge, between local, national and foreign institutions, configuring bi-/tri/multilateral arrangements; and; d) creation of shared spaces of solidarity, aiming at consolidating positive attitudes towards others and the formation of good practices.

Given this complex scenario, this study focuses on internalization at home with a focus on the Collaborative Online International Learning (COIL) model[4], and the practical challenges of its implementation in Brazilian institutional contexts considering the use of technologies in the development of their activities. To this end, after a bibliographic review, we focused on the experience report of a professor who promoted initiatives similar to COIL in the Brazilian university context in 2024. In a qualitative and interpretive analysis, we focused on the reports of how the interactions between the participants were carried out and what were the main challenges encountered, with an emphasis on the issue of the use of technologies. Finally, based on the analyses, we will point out strategies to overcome these limitations.

2 INTERNATIONALIZATION AT HOME AND THE ROLE OF TECHNOLOGIES

In this section, we first present different internationalization models and then focus on the COIL model, exploring its characteristics, the competencies to be developed, the studies carried out in the Brazilian context, the first steps in preparing proposals, the models already established, and the challenges of implementation.

The internationalization of Brazilian higher education is an ongoing process that requires coordinated efforts supported by institutions, government initiatives, and stakeholders. It is a crucial movement for the integration of Brazilian higher education institutions into the global context,

[4] COIL consists of connecting teachers and students through online platforms with the aim of promoting virtual mobility experiences, that is, providing distance dynamics interacting with international partner institutions. Its components and proposals will be explored in the development of this study.

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

promoting the enrichment of the educational experience and contributing to the formation of global citizens and the advancement of science and technology in Brazil. The expected result is an improvement in the quality of teaching, research, and extension, and an increase in the visibility and competitiveness of Brazilian institutions in the international arena.

Among the internationalization actions in Brazilian higher education, we highlight: 1) **International partnerships and agreements**, consisting of bilateral cooperation agreements with foreign universities and research institutions, as well as international university consortia and networks; 2) **Academic mobility**, consisting of exchanges that allow Brazilian students to go to foreign institutions and vice versa, as well as exchanges of professors and researchers, with incentives to carry out academic and research activities in foreign institutions; 3) **Dual Degree and Co-Supervision Programs,** which allow students to obtain recognized diplomas from two higher education institutions in different countries, or which allow the preparation of doctoral theses supervised by advisors from two institutions, with mutual recognition of the title; 4) **Collaborative Research Projects**, which promote the development of research projects in partnership with foreign institutions, leading to co-authorship of publications and joint participation in international calls for proposals, as well as the organization of and participation in international conferences and seminars; 5) **Curricularization of Internationalization**, which occurs with the incorporation of international content into the disciplines and curricula of undergraduate and graduate courses, as well as the offering of courses and disciplines in foreign languages, especially English and Spanish; 6) **Training and Development of Intercultural Skills** through educational activities (training and workshops) aimed at developing intercultural skills for students, professors and staff, and support for foreign students and researchers through welcoming and support programs for the integration of international students and researchers in Brazilian higher education institutions; 7) **Internationalization at Home**, through the promotion of multicultural activities and events that stimulate intercultural exchanges within the universities and the implementation of digital platforms and tools that facilitate international interaction and collaboration; 8) **Participation in International Rankings and Assessments**, which indicate strategies to improve the position of Brazilian universities in international university rankings and seek international accreditations and certifications that attest to the quality of the programs offered and, finally; 9) **Institutional Internationalization Policies**, based on the development of specific institutional plans and policies for internationalization and the creation and strengthening of offices dedicated to the management and promotion of international activities.

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

2.1 Internationalization at Home: Focus on COIL *(Collaborative Online International Learning)*

In this complex and challenging scenario, this study focuses on internationalization at home (hereafter IntC) as a strategy to overcome the difficulties of student and faculty mobility due to the lack of financial resources to fund scholarships abroad. Our focus is on a specific model known as Collaborative Online International Learning, in which digital platforms are used to facilitate collaborative learning experiences among students from different cultural and geographic contexts.

The term COIL emerged as an extension of traditional approaches to collaborative learning and attempts to manage online learning. Initially, various tools were used primarily to coordinate and manage course learning in virtual environments without an emphasis on intercultural exchange among students (Rubin, 2017). In 2006, the establishment of the SUNY COIL Center at the State University of New York was a milestone in the development of COIL as a result of the work of Professor Rubin (2017), who sought to connect university students from different countries and promote collaboration and international communication through technology and the Internet.

Thus, COIL was conceived as a pedagogical approach aimed at fostering intercultural awareness in a multicultural shared learning environment, using digital technology to connect university students from different countries (Niitsu et al., 2022). This model aims to enhance intercultural competence[5], digital literacy, and global awareness among university students from different parts of the world (Borger, 2022; Nair et al., 2023).

COIL programs are considered to promote intercultural collaboration and internationalization in higher education (Liang; Jia, 2022; Lima; Bastos; Varvakis, 2020). These programs provide opportunities for virtual collaboration between institutions from different countries, allowing students to work on joint projects and share knowledge and experiences (Hilderando Júnior; Finardi, 2018; Ramirez-Marin; Nuñez; Blair, 2021). Thus, through COIL, students can have experiences that can contribute to the development of linguistic competence and intercultural understanding, to achieve a common educational goal (Ramirez-Marin; Nuñez; Blair, 2021). Therefore, the COIL model creates equitable team-based learning environments where teachers from different cultures work together to develop a common curriculum that emphasizes experiential and collaborative learning for students.

[5]Intercultural competence refers to the ability to understand and value different cultures present in different social contexts. In this sense, this competence is developed through respectful interaction between different individuals, cooperation in multicultural spaces and the sharing of cultural knowledge, while maintaining one's own cultural identity. In teaching contexts, the teacher must enable reciprocal exchange between cultures, allowing students to teach and learn more about each other and about themselves (Bizarro; Braga, 2004).

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

In addition, research suggests that collaborative online learning can have a positive impact on student outcomes, fostering global development, enabling better development, greater learner confidence in the learning process of different disciplines (Sanford et al., 2021), promoting the co-construction of knowledge and better learning of the subject of study (Luk et al., 2020), encouraging social interaction and a sense of community among university students from different countries. For authors such as Bernard and Rubalcava (2000) and Wang (2011), student engagement in COIL activities enables the development of essential skills for participation in an increasingly globalized and interconnected world. In addition, the importance of socio-emotional interactions, communicative approaches, and learner support in the design of meaningful online collaborative learning experiences has been highlighted (Liqin, 2022; Robinson; Kilgore; Warren, 2017).

While a COIL approach can offer numerous benefits to the university students involved, such as personalizing a course to meet specific student goals and needs, fostering engagement, and enabling connections between students from around the world (Luk et al., 2020), it can also pose numerous challenges to the instructors mediating the teaching process. Marcillo-Gómez and Desilus (2016) point to the lack of collaboration, interaction, and feelings of cultural disconnection among the peers involved as possible barriers to collaborative online learning, as well as the limitations caused by technology. This suggests that teacher-mediators from different institutions must be prepared to deal with adverse situations, seek to develop collaborative skills among students, and carefully plan the design of learning experiences and the implementation of COIL learning models.

In the Brazilian context, there is a growing interest in the COIL approach to promote international cooperation and intercultural learning experiences. According to Júnior and Finardi (2018), Brazilian universities have explored the possibilities offered by COIL as a means to promote virtual exchange programs, develop students' global competencies, and strengthen partnerships with institutions abroad. In a study on the affordances of the COIL approach, Hildebrando Júnior, Finardi and El Kadri (2022) highlight its potential for implementing critical teaching-learning practices, promoting digital literacy, linguistic and intercultural skills among the students involved. Furthermore, the approach also allows the adoption of decolonial practices in the higher education context, encouraging reflection on others and oneself, in addition to providing tools for critical-reflective thinking and promoting progressive social change. However, the authors also highlight the need for careful planning (according to the academic calendar), compatible technology, and support from higher education institutions (Hildebrando Junior; Finardi; El Kadri, 2022).

In another study on the technological implications of COIL between a Brazilian and an

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

Argentinean university, the authors highlight crucial needs for teachers who intend to mediate the teaching-learning process in this approach. First, it is necessary to consider the appropriate use of technological tools to mediate collaboration between the two participating contexts. Furthermore, it is essential to develop the competence to act in a multicultural environment, overcoming language barriers. Likewise, the teacher must be able to plan and carry out educational activities in collaboration with the other teacher, taking into account students from both countries involved, respecting their cultures and evaluation criteria, that is, the teacher must be prepared to deal with possible cultural differences and know how to work around these differences. To this end, it is recommended that teachers prepare themselves in advance, focusing on developing specific skills for both contexts (Dalmau et al., 2024).

Once the concepts and characteristics of the COIL approach are understood, it is necessary to consider the first steps in outlining a proposal. Rubin (2017) points to the need for a training program for the partners involved that explores the following elements: a) introduction to intercultural sensitivity, b) connection with international partners[6], c) configuration of COIL modules, d) internationalization of learning outcomes and assessment of virtual collaboration, e) management of virtual teams, f) understanding of collaboration tools, and g) evaluation of the experience with international partners.

Even at the design stage of a COIL proposal, Collab (2024) identifies three phases for its implementation: 1) Finding a partner - the process begins with the definition by the teacher(s) involved of the theme and objectives of the project, which underpin the design of the learning strategy, and is followed by interaction with potential partners in order to identify one for the project; 2) Elaboration of the COIL project - after identifying the partner, the project should be defined, detailing its duration, the number of international teams and the elements per team (per partner), the activities and tasks that the students should carry out (presentation, regularity of (a)synchronous contacts, learning outcomes); the activities and tasks to be carried out by the students (presentation, regularity of (a)synchronous contacts, learning outcomes, deadlines); the dates of the periodic meetings to monitor and evaluate the project and the communication tools to be used; and, 3) Development of the COIL project - the success of a COIL project depends on good communication and interaction between the partners (teachers and students), who are responsible for identifying the needs and ensuring the active participation of the students in the project. The development of the COIL project should be based on

[6] The search for international partners can be facilitated by platforms such as https://coilconnect.org/, https://coil.suny.edu/, https://www.unicollaboration.org/.

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

guidelines common to the courses involved and should end with the evaluation (weaknesses and strengths) of the work developed by teachers and students.

However, the development of COIL programs in Brazilian universities may face constraints and challenges. The technological infrastructure of universities may provide limited Internet connectivity, especially in more remote regions, where the quality of the Internet may be insufficient to support the platforms required for COIL. Similarly, students and teachers may have limited access to devices suitable for full participation in activities, such as modern computers or smartphones. It is necessary to prioritize teacher training to develop familiarity with digital technologies and active methodologies since some teachers may have difficulty adopting digital tools necessary for COIL activities and overcoming resistance to paradigm shifts in relation to traditional teaching practices.

Language barriers must also be taken into account since the foreign language may be the language of communication in international projects, and teachers and students may face significant obstacles in communicating, translating materials, and adapting content to the cultural context of the partners. Likewise, COIL poses the challenge of overcoming cultural and collaborative difficulties through the development of intercultural skills (lack of knowledge or preparation to deal with cultural differences can affect collaboration between partner institutions) and the synchronization of activities between universities in different countries (which can become a logistical challenge). Finally, it is necessary to overcome the lack of knowledge about the COIL model by promoting the mass dissemination of successful initiatives so that teachers are familiar with the concepts and benefits of the model. Institutional support is essential to overcome budgetary constraints (cuts in funding make it difficult to implement projects that require investment in technology, training, and management), lack of specific public policies (expansion of government policies that directly promote internationalization through programs such as COIL), and reduction of academic bureaucracy (complex and slow administrative processes can make it difficult to form international partnerships).

Regarding funding, calls for proposals for COIL programs can be issued by universities, international education consortia, and funding agencies. Some public and private universities in Brazil have institutional internationalization programs that can include initiatives like COIL, such as calls for proposals for internationalization programs[7] and internal calls for virtual mobility[8]. In turn,

[7] Institutions such as USP, UFRGS and UNESP have internationalization projects that can finance activities such as COIL.
[8] Universities that already have international agreements can promote COIL projects through internal calls.

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

national funding agencies such as CAPES[9], CNPq[10], and research support foundations[11] can fund projects that involve international cooperation and the use of educational technologies. Regarding international organizations and partnerships, we can highlight AMEXCID[12], SUNY COIL Center[13], Erasmus+[14]. There is also the possibility of academic consortia and cooperation networks, such as ZICOSUR Universitário[15], Grupo Coimbra de Universidades Brasileiras (GCUB)[16], as well as private institutions and non-profit organizations, such as ABRUEM[17], Fundação Lemann[18], Fulbright Brasil[19], and FAUBAI-BRaVE (Brazilian Virtual Exchange)[20].

Based on the ideas presented, we believe that digital technologies represent a potential to be explored in the context of academic mobility, as we will discuss below.

2.2 Technologies, Networks and Mobility as Potencies for Internationalization at Home

Manuel Castells, in his work The Network Society (1999), has already pointed to a new paradigm of information technology whose primary characteristic is the improvement of the individual, where tools and machines are inseparable from the evolution of human nature. In other words, the culture of virtuality and interactive networks. "Network understood as a set of interconnected nodes" (Castells, 1999, p. 566, our translation).

Communication tools have created a new way of being and being in the world, which implies the local and the global, which allows a large flow of information between people in real time. Just as transportation technologies have changed the notion of space by enabling the flow of people around

[9] Coordination of Superior Level Staff Improvement. See: https://www.gov.br/capes/pt-br/acesso-a-informacao/transparencia-e-prestacao-de-contas/programas-projetos-e-acoes/internacionalizacao.
[10] National Council for Scientific and Technological Development and its notices supporting international Scientific, Technological and Innovation Research projects.
[11] In Paraná, we have the Araucária Foundation (https://www.fappr.pr.gov.br/Pagina/Acoes-Internacionais).
[12] Partnership with the Mexican Agency for International Cooperation and Development (AMEXCID) with UFMG.
[13] The world's leading COIL development center, linked to the State University of New York, frequently offers training programs and partnerships that involve funding for projects from partner institutions.
[14] The European Union programme supports international collaboration projects, which may include collaborative online learning initiatives (https://coil.suny.edu/).
[15] Some Brazilian universities participate in regional networks such as ZICOSUR, which promote international academic cooperation and can facilitate the financing of COIL projects. (https://zicosuruniversitario.com/).
[16] Promotes international collaboration programs that may include COIL (https://www.gcub.org.br/).
[17] Partnerships between the Brazilian Association of Rectors of State and Municipal Universities and UNESP.
[18] Independent and non-partisan family philanthropy organization, founded in 2002, from the desire to contribute significantly to a fairer and more advanced Brazil (https://fundacaolemann.org.br/).
[19] The United States Government Educational and Cultural Exchange Program (https://fulbright.org.br/).
[20] Program of the Brazilian Association of International Education that encourages the implementation of virtual academic exchange between Brazilian higher education institutions (HEIs) (https://faubai.org.br/projetos/brave/).

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

the planet, communication technologies have expanded the notion of place in an even more profound way. However, despite the continuous flow of information and the fact that universities are inherently conducive to new ways of teaching and learning, it is possible to conclude that a large part of university courses and academic systems have moved tentatively towards making curricula more flexible in the broad sense, enabling students to learn and appropriate scientific content beyond the walls of the university. For Lévy (1996), networking favors intelligence processes in virtual communities by expanding the variability of spaces and temporalities. According to him, new means of communication create diversified modalities of time and space and virtual communities capable of generating reciprocity and support through sustained interaction.

According to André Lemos (2009), mobility is inherent to human beings. For the author, the information city of the 21st century finds its fundamental principle in the culture of mobility: the unprecedented mobility of people, objects, technologies, and information. Communication is "moving" information from one place to another, producing meaning, subjectivity, and spatialization (Lemos, 2009).

The idea of academic mobility and internationalization requires a large financial investment, which is often beyond the reach of most students. In this sense, the advent of communication and information technologies makes it possible to share experiences across continents, from systematized studies to disciplines (synchronous and asynchronous), using platforms, extension courses, and/or groups with common goals. In this way, technologies become a driving force for expanding and deepening knowledge in the most diverse fields. Moraes and Mello (2020) argue that virtual environments can be rich in information sharing, collaboration, development of collective activities, serving as a space for people and/or students to help each other.

From the authors' point of view, we start from the idea that the activities planned in COIL initiatives should include the use of technological resources to promote collaboration between students and teachers from different countries in an online and interactive way. These resources may vary depending on the format of the project and the needs of the partner institutions, among which we can highlight: a) **Learning Management Platforms** such as Moodle, Canvas, Google Classroom, or Blackboard, used to share course materials, manage tasks and deadlines, and promote asynchronous discussion forums; b) **Video conferencing Tools** such as Zoom, Microsoft Teams, Google Meet or Skype, which allow synchronous sessions for live interaction, collaborative lectures and presentations, and group activities in real time; c) **Cloud Collaboration Tools** such as Google Workspace, Microsoft Office 365, Miro, and Padlet, which support the co-creation of documents, presentations, and projects,

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

and the storage and sharing of files); d) **Social Networks and Communication Applications** such as WhatsApp, Slack, Discord, closed groups on social networks for informal communication between participants and the organization, and ongoing support; e) **Translation Platforms and Language Tools** such as Google Translate, DeepL or Grammarly that help overcome language barriers and review texts and messages for greater clarity and accuracy; f) **Immersive Virtual Learning Environments** such as Second Life or Mozilla Hub for more interactive experiences in virtual reality (VR) and augmented reality (AR) for simulations; g) **Online Assessment Tools** such as Kahoot, Mentimeter, or quizzing tools integrated into the LMS that allow for formative and interactive assessment and real-time feedback; h) **Project-specific software** depending on the field of study; i) **Accessibility Features** such as automated transcription tools (Otter.ai, Closed Captions) and screen readers and other assistive technologies (OpenAI, 2024)[21].

It is important to emphasize that these resources must be combined strategically to meet the pedagogical objectives of the COIL project, taking into account the infrastructure and the level of technological proficiency of the participants.

3 THE CONTEXT AND DATA OF THIS RESEARCH

It is a qualitative study because it is interested in understanding the complexity of a phenomenon and because it works "with the universe of meanings, motives, aspirations, beliefs, values and attitudes that correspond to a deeper space of relationships, processes, and phenomena that cannot be reduced to the operationalization of variables" Minayo (2001, p. 14, our translation). Likewise, it is an interpretative research because it is based on the idea that social reality is constructed that subjects attribute meanings to their actions, and because it aims to understand social phenomena from the perspective of the participants.

The UEL Internationalization Forum, held in September 2024, was attended by 3 professors who shared their experiences in international collaborations in different fields. In common, the professors had been considered by the Notice 003/2023, issued by the International Relations Office of the institution, in partnership with the Secretariat of Science, Technology and Higher Education of Paraná (SETI) and the Araucária Foundation, which aimed to promote the offer of disciplines/courses

[21] OpenAI. *What are the technological resources involved in COIL activities?* GPT-4 2024 version. Artificial Intelligence. Available at: https://chat.openai.com/. Accessed on: Dec. 1, 2024.

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

in foreign languages, in order to strengthen the international insertion of UEL. The first proposal was prepared by the professor of the Postgraduate Course in Architecture and Urbanism, who planned to teach the discipline Sustainable Cities, neighborhoods and buildings: concepts related to sustainable development, in partnership with the State University of Maringá (UEM) and a university in India. The second proposal was submitted by a professor of the Postgraduate Program in Design to offer the subject Introduction to Design Thinking in partnership with Moholu-Nagy University of Art and Design in Budapest, Hungary. Finally, the third proposal was submitted by a professor of the Postgraduate Program in Philosophy to offer an extension course on Bioethics, Human Rights, and SDGs in partnership with the University of Mexico, involving undergraduate and graduate students and faculty.

To develop this research, we contacted the aforementioned professors and asked them to send us audio recordings in which they reported on: 1) the establishment of the partnership and the context of the experience; 2) the interactions that occurred between professors and students; and 3) the main challenges, with an emphasis on the issue of the use of technology. In this study, due to space limitations, we focused on the report of the professor of architecture and urbanism in order to understand the main challenges encountered and to point out strategies to overcome these limitations.

4 HOME MOBILITY: EXPERIENCE REPORT

Given that the main objective was to understand how the professor's experience promoting initiatives similar to COIL in the university context occurred, we tried to identify the main challenges encountered through the recordings. The professor's report is revealing in that it points out that the first challenge is institutional bureaucracy due to the difficulty of offering courses to students from different countries:

> I suggested a course called *Sustainable Cities, Neighborhoods and Buildings* , in partnership with another professor from the course. [...] The idea was to offer a course at the postgraduate level. However, to enable the participation of foreign students, the solution was to open an extension course that ran concurrently with the postgraduate course (Professor 1, translated by us).

Another aspect highlighted by the professor was the language barrier combined with the time zone, considering that the activities were synchronous. According to the professor, Brazilian students

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

who enrolled dropped out due to difficulties in understanding and using English (only 18 out of 47 completed the course) and the difficulty in finding suitable times for all the students. The experience included Brazilian, Colombian, Mexican, and Indian students. Regarding the challenges highlighted by the informant, similar data on language barriers were highlighted by Wang (2011) and, in the same direction, Rubin (2017) warns that a networked higher education model requires integration and dialogue between institutions from different countries with different educational structures, different academic calendars, time zones, and teaching styles.

In addition to linguistic and logistical challenges, cultural differences are also reported to be a major challenge:

> The cultural differences were also a challenge. I think there was a certain strangeness because of the informality and lack of hierarchy that we have in Brazil. In general, it was different for foreign students in terms of participation and also in terms of evaluation tools. I think that perhaps it was much easier for our students to understand the way we proposed the dynamics and our encouragement for them to participate. Gradually, everyone began to adjust and adapt (Professor 1, translated by us).

The professor's report shows that teaching requires a certain level of digital and pedagogical competence to develop teaching activities. When dealing with the assessment system, as well as encouraging student participation and interaction, the problem is located within the teaching and learning process. In this sense, contemporary pedagogical concepts assume that students are not mere recipients of scientific content. However, when developing online experiences, student interaction can be hindered both by physical distance and by the didactic organization of a teaching process that cannot be a mere repetition of traditional lectures. In the same vein, Rubi (2017) points out that COIL is not a technology or a technological platform, but rather a new teaching and learning paradigm that develops intercultural awareness.

Regarding the infrastructure needed to develop the experience, the professor reports that efficient equipment and quality internet are essential. He points out that the classes were taught in their own homes because they have better quality and connection capacity than the one provided by the institution. Furthermore, in terms of infrastructure, the professor points out that the lack of access to digital libraries in several languages is also an obstacle.

Finally, as a last challenge, the professor points out the problems related to certification:

> I think it is important to think about and align yourself with an international certificate validation. We had to go through this extension course and it ended up being a bit of a headache. It would be interesting if universities could

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

> formalize partnerships in a more bureaucratic way within the institution (Professor 1, translated by us).

As evidenced by the reports that have been presented, there are still numerous challenges to internationalization at home. It is imperative to underscore that, despite the institutional incentives, the onus of this responsibility primarily rests on the shoulders of the professor. This suggests a persistent absence of comprehensive investment from educational institutions, impeding the incorporation of internationalization efforts into the university's regular activities.

5 FINAL CONSIDERATIONS

The purpose of this study was to discuss the potential and limitations of Collaborative Online International Learning (COIL) and similar initiatives through the lens of a teacher's experience in the Brazilian university context in the year 2024.

The questions raised here aim to point out COIL as an alternative that can significantly contribute to the production of knowledge, exchange of experiences, and collaborative research, using the power of information networks. We reiterate that our analyses focus on internationalization in a comprehensive, sustainable, inclusive, and collaborative manner. However, given the challenges raised, such as academic bureaucracy, linguistic and cultural barriers, time zones, infrastructure, and pedagogical and instrumental conditions, initiatives in several dimensions are necessary.

Despite these constraints, initiatives such as training in technology and teaching skills for online education and languages, partnerships with international organizations (such as the SUNY COIL Center), and externally funded pilot projects can help mitigate these challenges. It is also important to raise awareness of the importance of internationalization and to reduce academic bureaucracy to facilitate the adoption of programs such as COIL.

Although it is not possible to explore in depth all the aspects of internationalization at home, it seems appropriate to emphasize the role of digital technologies and networks in this process, technological infrastructure, and teams with the capacity to provide participants with rich cultural and academic experiences.

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082

REFERENCES

BERNARD, R; RUBALCAVA, B. Collaborative online distance learning: issues for future practice and research. **Distance Education**, v. 21, n. 2, p. 260-277, 2000. Available at: https://journals.sagepub.com/doi/10.1177/1744987120970606. Accessed on: Jul. 2, 2024.

BIZARRO, R.; BRAGA, F. Educação intercultural, competência plurilíngue e competência pluricultural: novos desafios para a formação de professores de Línguas Estrangeiras. In: **Estudos em homenagem ao Professor Doutor António Ferreira de Brito**. Porto: Universidade do Porto. Faculdade de Letras, 2004. p. 57-70. Available at: http://hdl.handle.net/10216/8830. Accessed on: Jan. 23, 2025.

BORGER, J. Getting to the core of collaborative online international learning (coil). **Frontiers in Education**, v. 7, 2022. Available at: https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2022.987289/full. Accessed on: Jul. 2, 2024.

CASTELLS, M. **A sociedade em rede**. São Paulo: Paz e Terra, 1999. v. 1.

COLLAB. **What is COIL?** In: ColLab. S.l., 26 jun. 2024. Available at: https://collab-edu.com/hub/coil/p/whatiscoil. Accessed on: Jun. 26, 2024.

DALMAU, M. B. L; TOSTA, K. C. B. T; MENDES, M. S; PERALTA, G. M. del C. Online international collaborative learning between Brazilian and Argentine universities: implications for technological education. **EDUCITEC - Revista de Estudos e Pesquisas sobre Ensino Tecnológico**, Manaus, Brasil, v. 10, n. jan./dez., p. e231724, 2024. Available at: https://sistemascmc.ifam.edu.br/educitec/index.php/educitec/article/view/e231724. Accessed on: Jun. 26, 2024.

DE WIT, H. Globalization and internationalisation of higher education. RUSC. **Universities and Knowledge Society Journal**, v. 8, n. 2, p. 241-325 (eng), 2011. Available at: https://rusc.uoc.edu/rusc/ca/index.php/rusc/article/view/v8n2-globalizacion-e-internacionalizacion-de-la-educacion-superior.html. Accessed on: Jun. 26, 2024.

FINARDI, K. R.; GUIMARÃES, F. Internacionalização, rankings e publicações em inglês: a situação do Brasil na atualidade. **Estudos em Avaliação Educacional** (Online), v. 28, p. 600-626, 2017. Available at: https://publicacoes.fcc.org.br/eae/article/view/4564. Accessed on: Jul. 2, 2024.

HILDEBLANDO JÚNIOR, C. A.; FINARDI, K. R.; EL KADRI, M. Affordances da COIL para a internacionalização do ensino superior: um estudo de caso. **Revista da Anpoll**, [S. l.], v. 53, n. 1, p. 253–272, 2022. DOI: 10.18309/ranpoll.v53i1.1615. Available at: https://revistadaanpoll.emnuvens.com.br/revista/article/view/1615. Accessed on: Jun. 25, 2024.

HILDEBLANDO JÚNIOR, C., FINARDI, K. Internationalization and virtual collaboration: insights from coil experiences. **Ensino Em Foco**, v. 1, n. 2, p. 19-33, 2018. Available at: https://publicacoes.ifba.edu.br/ensinoemfoco/article/view/519. Accessed on: Jul. 2, 2024.

JOSEPH, C. Internationalizing the curriculum: Pedagogy for social justice. **Current Sociology**, v.

60, n. 2, p. 239-257, 2011. DOI: 10.1177/0011392111429225. Available at: https://journals.sagepub.com/doi/10.1177/0011392111429225. Accessed on: Jul. 2, 2024.

KNIGHT, J. An internationalization model: responding to new realities and challenges. In: DE WIT, Hans. *et al.* (Orgs.). **Higher education in Latin America**: the international dimension. The World Bank: Washington D.C., p. 1-38, 2005.

LEMOS, A. Cultura da Mobilidade. **Revista FAMECOS**, *[S. l.]*, v. 16, n. 40, p. 28–35, 2009. DOI: 10.15448/1980-3729.2009.40.6314. Available at: https://revistaseletronicas.pucrs.br/ojs/index.php/revistafamecos/article/view/6314. Accessed on: Jul. 2,2024.

LÉVY, P. **O Que é Virtual?** Rio: Editora 34. 1996.

LÉVY, P. **Cibercultura**. (Trad. Carlos Irineu da Costa). São Paulo: Editora 34, 2009.

LIANG, W.; JIA, C. Application of improved neighbor propagation algorithm in international communication and cooperation to promote internationalization of higher education. **Computer Applications in Engineering Education**, v. 31, n. 3, p. 696-709, 2022. Available at: https://onlinelibrary.wiley.com/doi/10.1002/cae.22578. Accessed on: Jul. 2, 2024.

LIMA, C.; BASTOS, R.; VARVAKIS, G. Digital learning platforms: an integrative review to support internationalization of higher education. **Educação Em Revista**, v. 36, p. e232826, 2020. Available at: https://www.scielo.br/j/edur/a/V6vYwQZS3Tx3NNzDNJsPsvP/?lang=en. Accessed on: Jul. 2, 2024.

LIMA, M. C.; MARANHÃO, A. O sistema de educação superior mundial: entre a internacionalização ativa e passiva. **Avaliação**, Campinas, v. 14, n. 3, p. 583-610, 2009. Available at: http://educa.fcc.org.br/scielo.php?pid=S1414-40772009000300004&script=sci_abstract. Accessed on: Jul. 2, 2024.

LIQIN, W. Influence of emotional interaction on learners' knowledge construction in online collaboration mode. **International Journal of Emerging Technologies in Learning (Ijet)**, v. 17, n. 2, p. 76-92, 2022. Available at: https://online-journals.org/index.php/i-jet/article/view/28539. Accessed on: Jul. 2, 2024.

LUK, P.; TSANG, J.; TSOI, H. S.; CHAN, K.; CHEN, J. Collaborative Online Learning in Undergraduate Medical Education: **A Scoping Review**. Research Square, 22 maio 2020. PREPRINT (Version 1). DOI: 10.21203/rs.3.rs-28397/v1. Available at: https://assets-eu.researchsquare.com/files/rs-28397/v1/9de84f69-2c56-43df-ba1f-9e533b9df662.pdf?c=1631841366 Accessed on: Jul. 2, 2024.

MARCILLO-GÓMEZ, M.; DESILUS, B. Collaborative online international learning experience in practice opportunities and challenges. **Journal of technology management & innovation**, v. 11, n. 1, p. 30-35, 2016. DOI: 10.4067/S0718-27242016000100005. Available at: https://www.jotmi.org/index.php/GT/article/view/C69. Accessed on: Jun. 23, 2024.

MINAYO, M. C. S. (Org.). **Pesquisa social:** teoria, método e criatividade. Petrópolis: Vozes, 2001.

MORAES, D. F.; MELLO, D. E. O ensino de conceitos na universidade: o Facebook como instrumento de mediação didática colaborativa. Revista Ibero-Americana de Estudos em Educação, Araraquara, v. 15, n. 2, p. 361–384, 2020. DOI: 10.21723/riaee.v15i2.12391. Available at: https://periodicos.fclar.unesp.br/iberoamericana/article/view/12391. Accessed on: Jun. 10, 2024.

NAIR, S.; ORIM, S.; KAUR, A.; AMOAKOHENE, G. Collaborative online international learning: case studies of HEIs in Sultanate of Oman, UK, and Ghana. **SHS Web of Conferences**, v. 156, p. 06002, 2023. DOI: 10.1051/shsconf/202315606002. Available at: https://www.shs-conferences.org/articles/shsconf/abs/2023/05/shsconf_ictl2023_06002/shsconf_ictl2023_06002.html . Accessed on: **Jul. 2,** 2024.

NIITSU, K.; KONDO, A.; HUA, J.; DYBAa, N. A case report of collaborative online international learning in nursing and health studies between the United States and Japan. **Nursing Education Perspectives**, v. 44, n. 3, p. 196-197, 2022. DOI: 10.1097/01.nep.0000000000000974. Available at: https://journals.lww.com/neponline/abstract/2023/05000/a_case_report_of_collaborative_online.19.aspx. Accessed on: Jul. 2, 2024.

PICCIN, G. F. O.; FINARDI, K. R. A internacionalização a partir de diferentes loci de enunciação: As concepções de sujeitos praticantes do currículo profissional. **Trabalhos em Linguística Aplicada**, v. 58, n. 1, p. 313-340, 2019. Available at: https://periodicos.sbu.unicamp.br/ojs/index.php/tla/article/view/8653317. Accessed on: Jul. 2, 2024.

RAMIREZ-MARIN, F.; NUÑEZ-FIGUEROA, L.; BLAIR, N. Collaborative online international learning: language and cross-cultural experiences of university students**. Matices en Lenguas Extranjeras**, v. 14, n. 1, p. 118-162, 2021. Available at: https://revistas.unal.edu.co/index.php/male/article/view/92144. Accessed on: Jul. 2, 2024.

ROBINSON, H.; KILGORE, W.; WARREN, S. Care, communication, support: core for designing meaningful online collaborative learning. **Online Learning**, v. 21, n. 4, 2017. Available at: https://olj.onlinelearningconsortium.org/index.php/olj/article/view/1240. Accessed on Jul. 2, 2024.

RUBIN, J. Embedding collaborative online international learning (COIL) at higher education institutions. **Internationalisation of Higher Education**, v. 2, p. 27-44, 2017. Available at: https://studyabroad.uic.edu/wp-content/uploads/sites/256/2020/08/Rubin-Embedding-Collaborative-Online-International-Learning-at-Higher-Education-Institutions.pdf. Accessed on: Jul. 2, 2024.

SANFORD, J.; ARGENBRIGHT, C.; SHERWOOD, G.; JORDAN, P.; HERRERA, M.; BENGTSSON, M.; MCDONALD, M. Student outcomes of an international learning collaborative to develop patient safety and quality competencies in nursing. **Journal of Research in Nursing**, v. 26, n. 1-2, p. 81-94, 2021.Available at: https://journals.sagepub.com/doi/10.1177/1744987120970606. Accessed on: Jul. 2, 2024.

STEIN, S; ANDREOTTI, V.D.O. Decolonization and higher education. In: PETERS, M. (Ed.). **Encyclopedia of educational philosophy and theory**. Singapore: SpringerScience+Business Media, 2016.

WANG, C. Instructional design for cross-cultural online collaboration: grouping strategies and assignment design. **Australasian Journal of Educational Technology**, v. 27, n. 2, 2011. Available at:

EmRede
Revista de Educação a Distância

UniRede

https://ajet.org.au/index.php/AJET/article/view/968. Accessed on: Jul. 2, 2024.

WELIKMALA, T. **Rethinking the international higher education curriculum**: mapping the research landscape. Nottingham, UK: Nottingham University, 2011.

DOI: http://doi.org/10.53628/emrede.v12i.1053 ISSN 2359-6082