Studies in Technology Enhanced Learning

Journal homepage: **stel.pubpub.org**

Article type
Full paper, double-blind peer review.

Publication history
Received: 30 October 2024. Revised: 14 March 2025. Accepted: 17 March 2025. Online: 05 May 2025.

Cover image
Badly Disguised Bligh via flickr.



Special issue TEL in English language teaching, learning and assessment | **More at** https://doi.org/10.21428/8c225f6e.2c972374

Borderless technology enhanced learning: The affordances of COIL in ELT educator preparation programs

Christina Wright Fields [1] and Jancileidi Hübner [2, 3]

[1] Teacher Education Department, Marist University, Poughkeepsie, New York, USA

[2] Institute of Humanities, Science, Education and Creativity, Universidade de Passo Fundo, Passo Fundo, Brazil

[3] Language Center, Universidade Regional Integrada do Alto Uruguai e das Missões, Erechim, Brazil

Keywords
English language teaching; Collaborative Online International Learning; virtual exchange; Technology Enhanced Learning; global competencies; cross-cultural learning

Citation
Fields, C. W., & Hübner, J. (in press). Borderless technology enhanced learning: The affordances of COIL in ELT educator preparation programs. **Studies in Technology Enhanced Learning, 4**(2), 1-22.

https://doi.org/10.21428/8c225f6e.2792a1cc

Abstract

The implementation of Collaborative Online International Learning (COIL) and Virtual Exchange (VE) projects is crucial for advancing Internationalization at Home (IaH) in higher education, especially within Educator Preparation Programs (EPPs). These cross-border collaborations democratize access to global interactions and are expanding in scope and quality. This research examines how undergraduate pre-service teachers engaged in Technology Enhanced Learning (TEL) during a COIL project, contributing to their global competencies as future educators.

This single case study provides a descriptive understanding of online cross-cultural collaborative interactions in teacher education. Two teacher educators from Brazil and the United States co-designed activities using online platforms, interactive tools, and social media to support innovative pedagogical approaches and enhance students' cultural awareness. Through cross-cultural dialogue and knowledge co-creation, students engaged in reflective discourse on diversity, acceptance, language, and power dynamics.

The analysis of structured activities and discussions offers practical insights and recommendations for teacher educators integrating similar approaches to promote global citizenship. The findings highlight how technology enhances learning and

https://doi.org/10.21428/8c225f6e.2792a1cc

cross-cultural engagement, equipping educators with tools to facilitate intercultural dialogue, improve language proficiency, and cultivate global competencies like cultural awareness and communication skills. This study illustrates how TEL supports the development of language proficiency and intercultural understanding, enriching EPPs and preparing educators for a globalized classroom.

1. Introduction

As a driving force of knowledge, Educator Preparation Programs (EPPs) have the potential to promote advances in education. Once they provide the pre-service teachers with the competencies necessary to face the new professional challenges, they can open doors to improvements in the field. English Language Teaching (ELT) EPPs are situated in a context where the globalized world demands renewed approaches, which means practitioners need to think further and go beyond the school walls. As a consequence, internationalization is increasingly becoming the focus of attention in the educational field.

The reflections presented in this work are structured around Hudzik's (2011) concept that "the ultimate purpose behind internationalization is the better connection of institutions to a changing local and global environment and providing more relevant service to society and clientele under these changing realities" (p. 8). Grounded in the importance of aligning education with the evolving dynamics of the contemporary global landscape, this article explores Technology Enhanced Learning (TEL) as an integral component of Collaborative Online International Learning (COIL) projects within EPPs and a means of promoting practices of Internationalization at Home (IaH). The concept of IaH has emerged to encompass activities that facilitate cross-cultural engagement among faculty and students in contrast to the internationalization practices that involve mobility. Beelen and Jones (2015) assert that "Internationalization at Home operates on the assumption that not all students will have mobility opportunities and that, while mobility can bring additional benefits for the mobile few, this should not be at the expense of internationalization for all" (p. 68). Accordingly, COIL represents an expanding practice within the broader framework of the internationalization process.

As noted by Rubin (2017), who coined the term in 2006, the COIL methodology "is based upon developing team-taught learning environments where teachers from two cultures work together to develop a shared syllabus, emphasizing experiential and collaborative student learning" (p. 34). According to the author, such projects "give new contextual meaning to the ideas and texts they explore, while providing students new venues in which to develop their cross-cultural awareness" (p. 34). This project represents an initiative focused on implementing technology-enhanced bilateral collaborations beyond borders. In doing so, it aims to internationalize the curricula on both sides and promote the development of the necessary global competence for pre-service teachers to navigate the evolving educational landscape.

Global competence is a key concept commonly used within COIL to guide and structure cross-cultural learning experiences. The Organization for Economic Co-operation and Development (OECD) and Asia Society (2018) highlight that "Global competence is multi-faceted and includes cognitive development, socioemotional skills, and civic learning" (p.12). It is a singular concept that encompasses various dimensions of skills essential to interact successfully with individuals from diverse communities around the globe whether in face-to-face or virtual environments, while also facilitating the resolution of potential challenges. In short, "globally competent students understand that the world is a system in which their actions, as well as the actions of nations, have consequences across the globe" (OECD/Asia Society, 2018, p. 12).

Drawing on the OECD's Global Competence Framework, the article highlights the following four key components of this competence:

1. Examine local, global, and intercultural issues;
2. Understand and appreciate the perspectives and world views of others;
3. Engage in open, appropriate, and effective interactions across cultures;
4. Take action for collective well-being and sustainable development.

The first component highlights the need to encourage awareness of diverse societal issues and interconnectedness. In this regard, participants of the project examined local and global scenarios gaining perspective on education and acknowledging differences in systems across countries. The second element recognizes the importance of cultivating empathy and openness to different cultural ways of knowing. This is mainly contemplated in introductory phases of such projects, where participants introduce themselves in activities that celebrate cultural diversity and break the ice for further work. The third component emphasizes the need to develop the ability to communicate and collaborate across cultural divides, as demonstrated by the findings of this study. It created a better opportunity for cross-cultural

collaboration and dialogue as a way to melt barriers and borders and bridge mutual understanding. Ultimately, the final component notes the need to create and sustain collective responsibility for contributing to a more inclusive, sustainable world.

Global competence impacts teachers' global dispositions, such as their attitudes, beliefs, and values which then influences their approaches to global education within the classroom. Consequently, teachers' global dispositions directly affect student learning outcomes, reinforcing the crucial role of education and EPPs in fostering globally competent citizens. Global competence aligns with the evolving demands of the ELT world, bridging the gap between traditional pedagogical practices and the growing need for intercultural awareness and global engagement. Recognizing the fact that global competence is developed over a lifetime, teacher educators' initiatives play a foundational role by nurturing students' abilities to view issues from multiple perspectives, including their own. Hence, the development of such competence must be integrated into ELT practices to ensure it is relevant, comprehensive, and responsive to global challenges.

This article is the outcome of a study implemented bilaterally in two higher education institutions, one in Brazil and the other in the United States. It brings a practical approach to the concepts of IaH, COIL, and global competence, along with the contributions of TEL for teacher education. These cross-cultural projects enhance both language and content learning, fostering global competence development.

Typically, technology integration in EPPs tends to focus on reflections on the application of such resources with future students, rather than on the development of relevant competencies. This research paper aims to contribute to the understanding of such potential benefits of TEL and COIL in EPPs, an area that represents valuable opportunities for further exploration. The examination of the participants' contributions is guided by the following research questions (RQ):

- RQ1: What impact do TEL and COIL have in cross-cultural learning for pre-service teachers?
- RQ2: To what extent could participation in the COIL project promote reflections on the power dynamics and the cultural perspectives in education?
- RQ3: How could the COIL project advance a change of perspective regarding language learning to foster more inclusive language education?

2. Literature review

2.1 English Language Teaching

English Language Teaching (ELT) is social. It is a communicative activity in which multifaceted learning emerges from collaborative meaning production and experimental interaction. Moreover, given the current role of English worldwide, ELT has assumed new goals and responsibilities. Richards (2015) noted "Now that English is the language of globalization, international communication, commerce, the media, and pop culture, different motivations for learning it come into play. English is no longer viewed as the property of the English-speaking world" (p. 14).

People around the globe learn English for a variety of reasons. From essential survival reasons to entertainment as a popular language, English is an object of study that means different things to different people. According to the author, "For some, it may arouse positive feelings – as the language of pop culture, the media, and social networking. For others, it may have associations with colonialism, elitism, or social and economic inequality" (Richards, 2015, p. 4). Consequently, ELT lies in a complex context that demands comprehensive initial preparation and continuous professional development of teachers who need to go beyond the linguistic constraints and embrace the social and political intrinsic aspects of the area.

Within this context, in view of the current status of English around the world, one important question this paper aims to address is: "What English are we talking about?" Answering this question, however, is a complex and abstract challenge. The conceptual framework guiding this study shifts away from traditional language teaching, which has long emphasized grammar and adherence to standardized norms, toward a more inclusive and adaptable view of language in a global context. This research aligns with the fact that English "has been described as the world's *lingua franca*" (Richards, 2015, p. 4). This perspective positions learners within an international context and encourages interactions with others who speak different varieties of English. Shifting the focus from mastering a single, standardized version of English to encouraging learners to navigate and adapt to various forms of English. For Brazilian students, this means embracing their version of Brazilian English and recognizing the legitimacy of their language used in global interactions.

https://doi.org/10.21428/8c225f6e.2792a1cc

Conversely, this study deals with the intersection between two scenarios as it connects native and non-native speakers of English in cross-cultural dialogue trying to embrace the subtleties of the process. It is also important to highlight that, in this study, the terms "native" and "non-native" speakers are adopted to refer respectively to the U.S. cohort and the Brazilian cohort. However, the use of the terms can be a controversial issue because as explained by Selvi, Galloway, and Rose (2024), "it is a difficult task to accurately measure who uses English today and to what extent it is used in various domains. This is because of the difficulties in defining precisely what is English, who is an English speaker, and what constitutes English use" (p. 13).

For the U.S. participants, addressed as native speakers, English remains as the mother tongue or first language and holds the position of the dominant language in several countries. Nevertheless, even for them, communicating in English in an international context comes at a cost. According to Richards (2015), "native speakers of English who use English daily as an international language [...] need to develop the ability to use a type of English that makes use of high-frequency vocabulary and that avoids colloquialisms, vague language, obscure syntax or a marked regional accent or dialect" (p.17). This ensures clearer communication and greater accessibility from linguistically diverse individuals, thus promoting more effective global interactions.

From the point of view of Zeng, Ponce, and Li (2023), the global popularity of English poses a challenge to its Anglo-Saxon ownership. The authors suggest "English is no longer the patent of the core countries but the commonwealth in world communication and even an index of local, multilingual identity. It provides one convenient method of communication for people in the world" (Zeng, Ponce, and Li, 2023, p. 7). Correspondingly, the Brazilian pre-service English teachers involved in the COIL project mainly focused on understanding English as a Lingua Franca (ELF). Within this perspective, the main aim of an ELF speaker is to communicate with other non-native speakers and they are "not considered merely *learners* striving to conform to native-speaker norms but primarily *users* of the language, where the main consideration is not formal correctness but functional effectiveness" (Hülmbauer, Böhringer, & Seidlhofer, 2008, p. 28).

Throughout the project, collaboration with native speaker U.S. pre-service teachers highlighted the Brazilian perspective on the language. This perspective brings attention to the concept of English as a Foreign Language (EFL), which often "takes the native speaker as a target" (Hülmbauer, Böhringer, & Seidlhofer, 2008, p. 28), potentially creating both advantages and disadvantages in the learning process. Within this perspective, aware of the fact that "it is possible for one person to be in the position of an ELF user at one moment and of an EFL user at another moment, depending on who he or she is speaking to and for what purpose" (Hülmbauer, Böhringer, & Seidlhofer, 2008, p. 28), this experience tried to find a common voice and bridge language barriers.

For the Brazilian students, as native speakers of Portuguese, the collaborative activities could feel disadvantageous as they played the role of EFL speakers. Conversely, for the U.S. students, the collaboration required an attitude of acceptance of diversity and a willingness to adapt their language used to meet the needs of their international partners. Trying to enhance authentic engagement and avoid these fixed relationships between languages, the collaborative activities in this COIL project approached English in consonance with what Holliday (2017) proposes, "the combating of prejudice in multicultural societies and in a globalized world, understanding the complex and political relationship between English, culture and the world, being an intercultural global citizen" (Holliday, 2017, p. 6).

2.2 Technology-Enhanced COIL

The exponential growth of online digital technology has always been a catalyst for enhanced language learning promoting a variety of educational possibilities worldwide. During the COVID-19 pandemic in 2020, diverse resources were used as emergency alternatives to face-to-face communication, transitioning to virtual environments in response to social distancing measures adopted at that time. COIL is advantageous due to its diverse collaboration models, which enhance student learning and engagement while offering a flexible and cost-effective approach by eliminating the need for student mobility (Vázquez-Villegas et al., 2024). This introduction of online digital technologies (i.e., Google Classrooms, Padlet, Mentimeter, Zoom, etc.) as a primary way of educational interaction expanded the borders of the classrooms and has fostered new pedagogical opportunities ever since.

The scenario began to integrate online collaborations and recognize virtual possibilities, popularizing and permitting access to cross-cultural opportunities beyond geographical barriers. Consequently, practices of Internationalization at Home (IaH) as defined by Beelen and Jones (2015) like "the purposeful integration of international and intercultural dimensions into the formal and informal curriculum for all students within domestic learning environments" (p. 69) were enhanced by technological resources.

Hackett et al (2024) redefine COIL as

> an inclusive, environmentally friendly teaching and learning method used to internationalise the curriculum, in which educators from different educational institutions in different countries connect to co-design and co-facilitate collaborative online learning assignments that are embedded within the curriculum, with the goal of facilitating the development of students' collaborative skills, intercultural competence, and curriculum content learning through collaboration (Hackett et al., 2024, p. 7).

The framework for the methodology outlines the key attributes that define a COIL project. According to Rubin (2017), a COIL project needs to be embedded in an academic course, which means extracurricular activities cannot be considered COIL. Additionally, this type of collaboration inherently involves faculty from different locations and cultures, who will co-design and, in most cases, co-teach the exchange. The project will be focused on collaborative work between diverse participants towards achieving equitable participation from both student cohorts lasting between 5 and 8 weeks. Furthermore, it has an interdisciplinary potential as it normally links different programs and courses. According to Rubin (2022), "when successful, this process leads to the development of new relationships and understandings about the discipline(s), about another culture or cultures, and about one's self for both participating students and professors" (p. 11).

Building on the COIL framework, and aligning with the conceptualization proposed by the aforementioned authors, virtual collaborations in international contexts have the potential to foster the development of a wide range of essential competencies in pre-service teachers within EPPs. Focusing specifically on language educators' preparation, it is essential to highlight that the development of linguistic knowledge, which is vital for the future performance of the professional, can be enhanced by the contextualized practice provided by the intentional use of technology throughout their involvement with COIL. Past research by Vázquez-Villegas et al. (2024) and Hackett et al. (2023) indicates that COIL increases intercultural competence by helping students develop the skills, knowledge, and attitudes necessary to navigate and understand cultural differences. Furthermore, students gain digital literacy by engaging in online tasks and utilizing different platforms (i.e., SLACK, Padlet, social media, FlipGrid, etc.) (Gockora, 2021). By using these different platforms, students develop cross-cultural communication skills and critical technical literacy skills. Given that the authors of this paper brought participants from the Global South and the Global North together, this literature review also considers the concept of Third Space COIL.

Third Space COIL (Wimpenny et al, 2022) is viewed as "promoting decolonized learning, in the sense that all players are mutually recognized, incorporated, and affected in the Third Space through alternative or "otherwise" forms of knowing, being, relating and expressing to people and knowledges" (p. 282). This perspective promotes a technologically enhanced transformative, equitable, and inclusive environment, while being aware of the challenges the Global South might face. Additionally, Wimpenny et al. (2022) state that, "Towards inclusivity and equity, we see COIL as having the potential to g/localize and contribute to IaH for all students" (p. 282). This study agrees with the potential of COIL as a Third Space to decolonize and deconstruct outdated concepts that still permeate higher education, playing a crucial role redressing past injustices.

Educational opportunities that manage to bring the Global South and the Global North together in a dialogic and productive way can foster the power of transculturality to bring a more holistic comprehension of the local and global communities (Haurwas, Kerkhoff, & Schneider, 2021). This study considers the concept of Third Space COIL by Davies-Vollum et al (2023) as a vehicle "to empower learners with the appropriate knowledge, skills, values, and attitudes to address the complex and multi-dimensional global challenges that are facing society" (p. 1). The development of teacher education students' global competencies is seen as obligatory, regardless of majors or educational programs. COIL projects, as practical applications of TEL, create valuable connections that facilitate this process.

2.3 Culturally Responsive Teaching framework

Culturally Responsive Teaching (CRT) is often integrated within COIL initiatives to encourage teachers to consider students' cultural backgrounds when designing and delivering lessons. CRT is an approach that emphasizes "using cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them" (Gay, 2000, p. 29). Culturally responsive educators adapt pedagogical approaches to create learning environments where students' cultural identities are recognized, affirmed, and leveraged to improve learning outcomes. Within COIL, educators can tailor instructional practices and materials (i.e., arts, readings, case studies, videos, etc.) to be culturally relevant. Seeing themselves and their communities reflected in the curriculum empowers students, developing

a sense of belonging, and leading to more engagement and success. Educators can provide opportunities for students to reflect on cultural differences and similarities and encourage diverse perspectives in discussions and assignments. With intentional engagement, students gain self-awareness by exploring their cultural identities, seeing how this shapes their educational journeys, and understanding how cultural competence shapes their interactions (Hauweras, Kerkhoff, & Schneider, 2021).

2.4 Existing research on collaborative projects in EPPs

Existing research on collaborative projects within EPPs highlights the significance of these initiatives in fostering cross-cultural understanding and TEL, both of which are crucial for preparing educators to navigate diverse classroom settings. Calvo and Hartle (2024) investigate an eight-week project conducted in 2022 and 2023 connecting Brazilian and U.S. pre-service teachers. Aiming to assess the impact of the collaboration on participant's digital competencies, global perspectives, and ability to communicate interculturally, the authors performed qualitative research analyzing the data collected through the project tasks. The outcomes of the project indicated that the participants evaluated it positively and demonstrated enhanced competencies and interactional skills, such as negotiation and leadership, in cross-cultural environments. They also elucidated the relevance of technology for the implementation of this type of project and how the collaborations turn the shift to a more student-centered approach throughout the courses.

Similarly, Huertas-Abril and Palacios-Hidalgo (2024) examined the integration of COIL in language teacher education connecting Spanish and U.S. EPPs. The findings emphasize the positive attitude pre-service teachers have regarding COIL and their feeling that the project enhanced their global awareness, equipped them with essential skills for the future and boosted their interest in such opportunities to collaborate cross-culturally.

Lastly, Anzai and Shimizu (2022) analyzed the reflections of both students and teachers. The study involved cohorts from an Academic English course at a Japanese university and a Japanese as a foreign language course at a U.S. university. The study's outcomes demonstrate that COIL has a huge potential for preparing pre-service teachers for a globalized online scenario in education.

Collectively, these studies reinforce the value of COIL as a transformative tool in teacher education, promoting IaH and equipping future educators with essential global competencies. However, it is relevant to mention that they also highlight persistent challenges that require strategic planning to ensure the sustainability and effectiveness of COIL initiatives. Huertas-Abril and Palacios-Hidalgo (2024) highlight that to maximize the benefits of COIL, faculty training is essential, including participation in similar projects for hands-on experimentation. Furthermore, Calvo and Hartle (2024) elucidate challenges which interfere in the sustainability of the project. They refer to the participants' busy schedules, the different class formats, and the difficulties in communication due to cultural differences, for example the varied usage of communication apps such as WhatsApp between the two countries.

3. Critical theory framework

The integration of a project like this in EPPs is in accordance with Boix Mansilla (2016) who affirmed "to cultivate global dispositions, teachers must weave opportunities to inquire about the world, take multiple perspectives, engage in respectful dialog, and take responsible action as a routine and integral part of everyday life in the classroom" (p. 3). Additionally, it addresses a key issue highlighted by Parmigiani et al. (2022), who explains how unclear it is to what extent such dispositions are embedded in EPPs. According to the authors,

> for students in schools to learn about and become interculturally sensitive or globally competent [...] higher education needs to create and promote activities which develop such dispositions in teacher educators who in turn can embed this within programmes of study for preservice teachers (Parmigiani et al, 2022, p. 2).

The frameworks utilized in this study focus on enhancing collaboration between international students, exploring power dynamics and identity, and promoting cross-cultural exchange. It employs a critical lens to examine the power dynamics and cultural exchanges between Brazilian and U.S. pre-service teacher education students, highlighting the issues of equity and representation in education. Critical theory influences the entire research process, from design through data collection and analysis, ensuring that the study reflects an awareness of power, marginalization, and social justice. The critical conceptual framework guided the research design and implementation, while also influencing key aspects such as the researchers' stance, data collection methods, and analytical processes, by foregrounding the impact of power, oppression, and social justice influence (Kincheloe & McLaren, 2005). In this approach, the researchers seek not only to understand but also to critique the structures that perpetuate inequality in educational contexts.

Tierney and Rhoads (2004) outlined five essential elements for employing a critical lens in research:

1. Research efforts need to be tied to analysis that investigate the structures in which the study exists.
2. Knowledge is not neutral. It is contested and political.
3. Difference and conflict, rather than similarity and consensus, are used as organizing concepts.
4. Research is praxis-oriented; and
5. All researchers/authors are intimately tied to their theoretical perspectives. We are all positioned subjects (p. 237).

By actively interrogating and disrupting systems of power, educators can foster a deeper understanding of the complexities involved in cross-cultural educational exchanges. This approach encourages educators and students to critically examine educational practices and their own identities, fostering the development of intercultural awareness and global citizenship.

3.1 Positionality

Critical theory advocates subjectivity and reflexivity, encouraging researchers to reflect on their positionality and how their identities, biases, and perspectives influence their words, actions, and feelings during the research process (Hauweras, Kerkhoff, & Schneider, 2021). Furthermore, in alignment with qualitative research practices, it is essential to acknowledge the researchers' positionality, as it shapes perspectives and interactions throughout the study. Author 1 is a U.S. teacher educator with over a decade of experience working with pre-service teachers and has been involved in global education endeavors for more than twenty years. Author 2 is a Brazilian English teacher and teacher educator who has been involved in analyzing the affordances of technology to enhance language learning for more than ten years. As individuals from distinct cultural contexts, we acknowledge that our perspectives could influence how we interpret participants' behaviors, communication styles, and experiences.

As teacher educators, we align with a philosophical orientation that views power as an inherent and transformative force in the teacher-student relationship. Thus, we are acutely aware that these power imbalances are not merely structural but are also deeply embedded into educational interactions, influenced by factors such as authority, cultural norms, and language. Our critical perspective encourages us to explore how these power relationships influence both the teaching process, and students' learning experiences, particularly in intercultural online contexts, where cultural and linguistic differences may further complicate interactions. We aim to uncover how power affects the complexities of intercultural interactions and its impact on language and cultural perceptions in TEL. Finally, as both instructors and researchers, we are mindful of the dual roles we occupy and the potential bias that may arise from our authority within the classroom. One key bias is role conflict (Atkinson, 2025), where our teaching responsibilities may influence the design or interpretation of research, potentially skewing results to align with educational objectives rather than research goals. Another potential bias is confirmation bias, where instructors may unconsciously prioritize findings that align with their teaching philosophies or beliefs, overlooking contradictory data. To mitigate this, we utilized strategies such as reflexive journaling and peer debriefing to ensure that our interpretations and analyses remained grounded in the perspectives and experiences of the participants.

4. Research design

A critical framework informed the choice of a qualitative methodology, enabling a deeper exploration of power dynamics within a TEL intercultural education project involving Brazilian and U.S. teacher education students. Thus, a case study approach was adopted to investigate the research questions, drawing on data from multiple sources, including student interactions, reflections, and digital artifacts. Based on the design of an online module (**iEARN KOSKO**) to explore perceptions and understanding of language and power, the overarching goal was to facilitate interactions that highlighted the intersectionality of individual and cultural funds of knowledge, drawing inspiration from works such as Choo (2021) and Moll et al. (1992).

4.1 Research context

The research context was a cross-cultural TEL project, where various elements such as digital communication platforms, collaborative tools for group work, and interactive assignments were integrated to explore and analyze the impact of technology on intercultural learning and language development. An essential component of this project was the virtual exchange, which facilitated real-time interactions between students from diverse cultural and linguistic backgrounds. The virtual exchange platforms played a central role in supporting engagement and fostering intercultural dialogue.

https://doi.org/10.21428/8c225f6e.2792a1cc

During each virtual exchange, one group of Brazilian students was paired with one group of students from the U.S. These groups were formed randomly by the educators. The teacher educators collaborated to design the intercultural experiences for the students, resulting in eight-week sessions that were structured into 4 distinct modules. Throughout the virtual exchange, students received three different prompts (one prompt every two weeks) and corresponding resources, which helped them to initially build community and then engage in dialogues about language and comparative education in a TEL and COIL space (see Appendix A). Each participant submitted one response to the prompt and engaged with at least one other participant from the other country by responding to their submission. During the virtual exchange, students utilized various digital modalities, including Padlet, Google Slides, Google Meet, and TikTok, to facilitate communication and collaboration.

The first module focused on introducing participants to each other and establishing a foundation for cross-cultural dialogue. Activities included icebreakers and discussions aimed at fostering rapport and community building, setting the stage for deeper engagement in subsequent modules. The next module shed light on the intersection of language learning, identity, and power. Activities were motivated by a Youtube video (Cookies, 2022) and leveraged reflections on the language learning process. There were opportunities for participants to understand the difficulties faced by language learners as well as the current status of English as an international language. The third module was implemented to promote dialogue about diversity in education around the world. Participants could, therefore, ask each other questions about the other country's educational systems and approaches. The module permitted the co-creation of knowledge about education around the world and the appreciation of the different perspectives local/global comparative studies can bring. The last module was implemented synchronously and aimed at final reflections on the collaborative work implemented throughout the project. To encourage active collaboration, the modules were scheduled as part of the coursework, and students' participation was required.

4.2 Participants

Sampling occurred on two levels. First, by selecting the case, which referred to the specific cross-cultural TEL project as the research context; and second, by selecting the participants within this case, who were the students actively involved in the project (Jones, Torres, & Arminio, 2006). The case selection was based on the desire to explore cross-cultural interactions, language education, and power dynamics between teacher education students from two different educational contexts. This study focuses on the experiences of 25 Brazilian pre-service English teachers and 36 pre-service K-12 teachers from the U.S., who participated in two virtual exchange sessions during the 2023-2024 academic year. The majority of U.S. and Brazilian participants were white and female. In the U.S. they were varied in class standing (i.e., freshman, sophomore, junior, and senior). Conversely, in Brazil, most of the participants of the first edition of the project were in their fifth and last year of study and, in the second edition, in their third year of study. Participants were chosen based on their enrollment in teacher education courses led by the researchers, making this a convenience sampling approach. The procedures of this study conformed to the policies and guidelines of our institutions, ensuring the protection of participants and the integrity of the study. Both researchers had previous experiences with virtual exchanges, internationalization in teacher education, and study abroad.

4.3 Methodology

A qualitative methodological approach was used in this research to examine a bounded single case study (Creswell, 2007), focusing on how Technology Enhanced Learning (TEL) facilitated the development of global competencies through cross-cultural collaborations between Brazilian and U.S. teacher education students. A case study approach was selected for several reasons because it allows for an in-depth exploration of a specific context–in this case, a cross-cultural TEL project–providing information-rich detailed descriptions (Jones, Torres, & Arminio, 2006) that illuminated how technology-enhanced learning influences intercultural learning and language development. This approach also encourages the exploration of both individual and collective experiences, offering insights into cross-cultural and digital education contexts.

4.4 Data collection methods and instruments

Data were collected using a combination of qualitative methods including contributions on Padlet, where students shared both textual and audio reflections on the themes discussed in each module. We observed student engagement during the cross-cultural TEL project, noting how they interacted with the digital platforms and participated in discussions and activities. Lastly, students maintained reflective journals, offering personal insights on their learning journey and the impact of cross-cultural collaboration on their understanding of language and culture. The reflections occurred concurrently with the Padlet. These methods allowed for a rich, multifaceted understanding of how TEL facilitated intercultural interactions and supported

language learning within the project. Lastly, the researchers' reflexive journals were included in the data analysis, offering an additional layer of insight. These journals allowed the researchers to reflect on their perspectives and experiences during the study, enriching the overall analysis.

4.5 Data analysis

This study employed a critical approach that went beyond surface-level patterns to explore how power structures are maintained or challenged in the data, which led to thematic analysis focusing on ways that language, practices, and structures reproduced inequality. Thus, the researchers engaged in a comprehensive analysis of how online learning environments facilitated the exploration of language, power, and cultural understanding in shaping global competencies. The researchers focused on identifying key themes, patterns, and nuanced responses in participants' experiences to illustrate students' understanding of the complexity and multifaceted nature of language (Flores & García, 2020) while highlighting the role of TEL in fostering intercultural awareness and strengthening the capacity of future educators to navigate and appreciate diverse linguistic and cultural landscapes.

Initially, we applied open coding to break the data into manageable pieces (Jones, Torres, & Arminio, 2014), which allowed us to explore how dominant ideologies shape knowledge production and social realities. Through this process, we identified preliminary codes by grouping similar ideas into broader themes related to the research questions, such as intercultural awareness, language, and the impact of TEL. Intercultural awareness was utilized when participants mentioned sharing about learning about different cultures, whereas language was applied when participants discussed their language development, challenges, or appreciation. TEL was referenced when participants noted specific digital tools or platforms used in the TEL project.

We focused on how these themes emerged across different sources of data, including Padlets, observations, and journals. These codes were refined through axial coding, where we began to group similar themes and explore relationships between them. Next, we merged overlapping codes into broader categories that captured key aspects of the students' experiences (Creswell, 2013). This iterative process of coding and merging enabled us to develop an understanding of how TEL and COIL environments impacted students' perceptions of language and culture. By linking codes together, we were able to identify key final themes, thus providing deeper insights into how the students reflected on their cross-cultural learning in the online environment.

To ensure the reliability of our coding process, we utilized inter-coder reliability, where each researcher independently coded a subset of the data. We also conducted cross-case comparisons to identify similarities and differences in experiences, particularly between students from different cultural backgrounds. Additionally, we met periodically to compare our findings and engaged in dialogue regarding our findings, noting any discrepancies, which helped ensure consistency in how codes were identified and applied. We analyzed our reflexive journals to consider how our perspectives and biases might have influenced data interpretation.

The final codes and themes were developed based on consensus between the coders, with overlapping categories merged to capture the most prominent aspects of students' cross-cultural learning in a TEL and COIL environment shared below as our findings. Grounded in qualitative analysis, our findings elucidate participants' comprehension of language complexity in online spaces and possibly shed light on the hurdles educators face in navigating discussions on language impact in TEL.

5. Findings

In this section, we explore the reflections extracted from the project activities. The excerpts, from both cohorts of American and Brazilian students, were divided into key themes identified during the analysis. They highlight how the collaborative interactions expanded the participants' worldviews, nurtured cross-cultural empathy, and sparked personal growth in their roles as future educators. The extracts mentioned in the following sections were produced by the project participants and are presented here by using pseudonyms to ensure their anonymity and protect their privacy.

5.1 TEL and COIL in enhancing cross-cultural learning for multicultural classrooms

The integration of TEL tools such as Padlet and Google Meet enhanced the intercultural education project and afforded students with opportunities to engage in comparative education studies, expanding their understanding of global educational differences. Padlet supported collaborative learning by enabling students to share both text and audio reflections. It also provided an opportunity for them to review each other's contributions and engage in asynchronous dialogue. In contrast, Google Meet was utilized for synchronous meetings, fostering real-time interaction and collaboration, allowing students to engage in face-to-face dialogue across borders. During the live video conference,

students were able to share slides and resources (i.e., websites, readings, videos, etc.) and utilize the breakout rooms for smaller pair-share discussions. These TEL tools were instrumental in supporting a COIL environment that fostered transformative cross-cultural exchanges and reflection.

As the participants highlighted, leveraging technology to enhance learning in international collaborative environments permits the broadening of perspectives and the development of deeper awareness and critical skills. To illustrate this key theme, Jennifer, a student from the U.S., remarked:

> As a student, I greatly valued the intercultural education project because it allowed us to connect with other aspiring educators from another part of the world. Through this experience, we were able to learn more about the education system in Brazil which I thought was very interesting.
>
> In addition, I thought hearing the voices of every student in the project was very unique and featured the diversity of the individuals who participated. During the project, I was surprised by the lack of foundational knowledge I had about the differences in education.

Jennifer's reflections emphasize two significant aspects of the COIL project. First, it demonstrates that students are often unfamiliar with the nuances of international education systems. This lack of foundational knowledge can hinder their ability to appreciate the global diversity in educational practices. During the project, the students were introduced to the complexities of another country's reality being able to ask each other about deep issues and shallow curiosities regarding education in general terms according to their preferences. This possibility, fostered by TEL and the COIL methodology, enabled them to gain insights that traditional classroom settings may not provide. By reviewing and responding to each other's Padlet reflections, students engaged in meaningful dialogue that challenged their assumptions and broadened their understanding of different cultural contexts. This kind of intercultural experience promotes a richer worldview, helping aspiring educators become more adaptable and empathetic in their educational approaches. Through this experience, the teachers learned firsthand how to navigate and appreciate cultural differences, while simultaneously developing the necessary skills to create and sustain multicultural classrooms.

Secondly, Jennifer mentions "hearing the voices of every student", which underscores the power of multimodality in creating an inclusive and dynamic learning experience. This TEL-based project allowed participants to listen to one another through recorded quotes and reflections on language learning. This feature added an auditory dimension that celebrates the beauty of diverse accents and speaking styles. It showcased the individuality of the global peers while highlighting the project's commitment to inclusivity and connectedness. On this basis, another quote from William, a U.S. student, becomes relevant:

> My favorite of the Padlet exercises was when we chose a quote that discusses the importance of language for communication. I was able to learn about poems I had never heard of from the students in Brazil. For example, X student shared a poem by Rupi Kaur about accents and her life as an immigrant. The student read the poem in both English and Portuguese which I found to be very beautiful because the feeling of the poem changed between the two languages. Although I could not understand the Portuguese this led me to feel the heart of the poem more.

William's response to the bilingual poem-sharing activity highlights the impact of experiencing cultural and linguistic diversity firsthand. The incorporation of Portuguese in a project developed in English which involves native and non-native speakers of this language created a unique opportunity for students to engage with the emotional and cultural layers embedded in language. When it comes to the preparation of future teachers, understanding that sometimes the emotional depth of language transcends comprehension is a critical issue to guide the implementation of inclusive approaches. Classrooms continue to become more linguistically diverse, thus teachers must be proficient in culturally responsive teaching. Therefore, this activity was not only an aesthetic experience but also an educational one, because it demonstrated that language carries cultural significance and emotion that varies with each translation and accent.

This exercise is especially significant for preparing U.S. pre-service teachers for the multicultural classrooms they will likely encounter due to an increase in linguistically and culturally diverse students. The exposure to diverse voices, accents, and languages can help pre-service teachers cultivate an appreciation for multilingualism and the cultural stories their future students may bring. This process of reflection and learning from other viewpoints was intended to empower future teachers to approach their diverse classrooms with sensitivity and empathy, which according to the next extract is likely to happen. In that respect, a Brazilian participant, Helena, expressed:

> It brought the opportunity to meet new people and educational realities. It gave us the chance to reflect on our practice as language teachers. It can bring us insights from the perceptions and views of others that transform our own reality.

Helena's quote emphasizes TEL's transformative potential when it comes to intercultural collaboration in educator preparation programs. It suggests that insights from others can help transform one's reality, which underscores the importance of taking other perspectives into account. Therefore, engaging with diverse viewpoints encourages adaptability, critical thinking, and empathy, considered core aspects of global competence. In an increasingly interconnected world, teachers who understand and appreciate different personal perspectives and educational contexts are better equipped to create inclusive learning environments.

Nevertheless, participants highlighted not only their diverse perspectives but also their shared ones. João, another Brazilian student, states:

> Connecting people around the world, future teachers, their views about us, and our views about them. The exchange always adds some extra knowledge and makes us reflect on the aspirations of people who, despite being part of another culture, share a similar expectation of making a difference in the lives of students around the world.

This quote reinforces the significance of TEL to promote cross-cultural exchange in shaping future educators' global understanding and sense of purpose. Participating in a Google Meet permitted students to interact in real-time, fostering deeper, more immediate conversations about cultural perspectives regarding language and education. The quote highlights the shared goal of making a difference in students' lives, which resonates cross-culturally. Recognizing common aspirations builds a sense of global solidarity. For future teachers, feeling as a part of a global community with shared goals can inspire collaboration, mutual respect, and a shared commitment to improving education worldwide.

Katherine, another student from the United States shared the following to corroborate:

> I valued the global perspective that our intercultural education project gave me. In previous education courses, I have learned about the education system in New York or other regions of the country, but it was valuable to learn about another country's systems. This helped me understand how culture and education shape our lives. Further, I valued being able to connect with other education students because it is always nice to feel like you are part of a greater community.

This quote reinforces some of the key takeaways. First, it highlights the importance of expanding students' educational horizons beyond familiar contexts, enhancing their cultural awareness. Second, the student expressed appreciation for being a part of an interconnected world, where they are afforded opportunities to extend their peer networks across cultures. This reinforces the affordances of TEL and COIL to permeate teaching practices that go beyond informing students, inspiring a genuine sense of belonging to a global community of educators.

The extracts demonstrate a blend of similarities and contrasts in perspectives from both sides of the COIL project. While U.S. students mostly emphasized their surprise at the differences between education systems and the value of expanding their global awareness, Brazilian students highlighted the transformative power of putting things into perspective and reflecting on their practices and realities through the lens of others' viewpoints. Both groups, however, shared a common appreciation for the sense of community fostered by the project, and the shared goal of making a positive impact in the lives of their future students. The reflections from both U.S. and Brazilian participants reveal how TEL not only illuminated the diversity of educational contexts but also emphasized shared values, demonstrating that, despite differences, future teachers worldwide are united by a common commitment to fostering inclusive and impactful learning environments. This convergence of perspectives testified to the transformative potential of TEL and COIL in preparing educators for multicultural and interconnected classrooms.

5.2 Power dynamics and cultural perspectives in inclusive classrooms

The key takeaway of the project is that language teaching and education as a whole are intrinsically crossed by power dynamics. In a multicultural context, the ability to communicate in a shared language can both bridge and reveal divides. Angelina, a student from the United States noted the critical role of educators in promoting the understanding of cultural and power dynamics:

https://doi.org/10.21428/8c225f6e.2792a1cc

> Implicit bias matters throughout the world because individuals of all cultural backgrounds can be affected by being treated differently. Through our interaction with University X, it has become clear to me that teachers have a responsibility to provide cultural opportunities for their students to learn more about each other.

By recognizing that individuals of all cultural backgrounds can be affected by unequal treatment, the student acknowledges the impact of implicit biases and the need for educators to actively work against them. Angelina emphasized the importance of building inclusive classrooms and highlighted the need for teachers to be proactive in learning about, with, and from their students. This emphasizes that the rich learning environment of an international collaborative project prepares future teachers to navigate the multicultural world in which they will take professional action within the educational environment. The COIL framework and TEL environment afforded students opportunities to engage with peers from different linguistic and cultural backgrounds, being able to reflect on the limitations of traditional, monolingual approaches to education. When teacher educators intentionally provide opportunities for their students to engage with and appreciate different cultures, they contribute to more empathetic and inclusive classroom environments now and in the future.

Moreover, Michele, another U.S. student considers how vulnerable one can be while speaking a language that is not theirs:

> Language is the bridge for communication, I believe that in order to truly understand one another this comes from a place of mutual vulnerability. Language and language learning creates a vulnerable space for people to try to better understand others. For the people learning, we must be comfortable making mistakes and for those who already know the language we must not pass judgment but rather appreciate that someone is trying to communicate in our 1st language.

This reflection highlights the critical role of vulnerability in language learning, which is highly relevant to the project discussed in this text, as it involved both native and non-native speakers of English. This insight directly relates to the dynamics of Global North and South interactions, where English, often viewed as a dominant language of the Global North, may create power imbalances in cross-cultural exchanges.

At this point, it is valuable to revisit the dynamics of Third Space COIL, where both sides come together on more equitable grounds to share and learn from each other. In this space, vulnerability becomes a tool for dismantling power structures, as students from the Global North are encouraged to step out of the comfort zone of linguistic dominance, and students from the Global South can feel empowered by sharing their unique linguistic and cultural perspectives. This approach promotes a learning environment where both sides respect and validate each other's experiences, reducing hierarchical dynamics and fostering a shared commitment to mutual understanding.

João, a Brazilian student, contributed to the discussion regarding the power dynamics and the cultural perspectives in education by bringing the inclusion of immigrants in schools to light:

> I refer to the immigration phenomenon and it involves more than learning a second language, English in this case. I think teaching language to immigrants as well as teaching to anyone else, is relevant to have a look at how the language works in a society, mainly for those who are not native speakers. I would say you should ask yourself as a teacher: are my students able to express their feelings and their own accent with no judgments in my classroom? I believe the role of the teacher begins with a critical view and having a feeling of students' insecurities in the learning process or their fears living away from their home country, for example. We must not accept the mainstream economy as our guides in our work as teachers.

This participant emphasizes valuable insights that are relevant to Brazilian future English teachers and U.S. K-12 future educators, particularly in the context of diverse, immigrant-inclusive classrooms. It highlights the importance of teaching language as a tool for social integration, giving students the means to express themselves and participate in society. It also sheds light on the call for a teaching approach that goes beyond mere language instruction and considers the well-being of the students. According to the pre-service teacher, embracing students' differences and promoting inclusion can help immigrant students feel more comfortable and secure in their new learning environment. This quote celebrates the reflections built during the COIL project to help future educators develop the empathy, social awareness, and inclusive practices necessary for working with immigrant students. This experience prepares them to create more supportive, culturally responsive classrooms that respect and value diversity.

The three extracts selected to explore power dynamics and cultural perspectives in education demonstrate a shared commitment to fostering inclusive classrooms. Participants highlighted the responsibility of teachers to address implicit biases and the role of vulnerability in language learning as a bridge to mutual understanding. Both perspectives underscore the importance of seeing language as a tool for social integration and creating empathetic spaces where students feel safe to learn and express themselves without fear of judgment, especially when navigating linguistic and cultural differences, such as in a context of immigration.

Despite their differing cultural contexts, both groups converged on the idea that teachers must adopt a critical and inclusive stance, challenging power imbalances and promoting a shared sense of humanity within their classrooms. This shared vision once again highlights the transformative potential of COIL projects developed through TEL to unite educators across borders in their commitment to equitable and culturally responsive teaching. By engaging in mutual vulnerability and empirically embracing diverse perspectives, future teachers from both countries were empowered to rethink traditional hierarchies and envision classrooms where every student feels valued and included. This alignment underscores the universal role of educators as agents of change in building more inclusive, understanding, and empathetic educational environments.

5.3 Rethinking language education: Brazilian perspectives and global teaching insights

This section delves deeper into language education, focusing on global teaching insights from Brazilian participants majoring in this field. Through the use of TEL within the COIL framework, students came to realize that language learning also encompassed understanding and respecting different ways of thinking, communicating, and engaging with the world. As the students engaged in discussions across borders, they learned that language is intertwined with cultural identity and social norms. For example, Padlet allowed students to share insights about how their cultural perspectives influenced their educational aspirations and Google Meet allowed students to engage in real-time conversations where they could ask each other questions and clarify meanings about educational system practices. The reflections on learning an additional language encouraged the pre-service teachers from both sides to rethink traditional views on bi/multilingualism, fluency, accents, and insecurities that permeate the process highlighting the importance of a change of perspective to foster a more inclusive language education environment.

One of the biggest takeaways for the U.S. side regarding language learning can be understood by analyzing the following quote shared by Peter:

> I was surprised to learn about their learning of English in Brazil. I think in the United States, we do not take language education very seriously and almost take our second language opportunities for granted. To hear that another country places so much value in truly mastering a language is incredibly interesting and I think should be transferred to our attitudes in the United States.

This reflection offers an insight into the different values placed on language education in Brazil and the United States, highlighting the importance of understanding these perspectives within the broader context of global education. This illustrates a central theme of the collaborative project: intercultural understanding and mutual appreciation. For the American side, this takeaway led to a critical reevaluation of how additional language learning is approached in the U.S. and the realization that the value of bi/multilingualism is often taken for granted due to the less perceived need for it in predominantly English-speaking environments.

For the Brazilians, this insight from their U.S. peers serves as a source of empowerment. The acknowledgment positions Brazilian students as role models for language learning dedication and underscores the importance of linguistic resilience and perseverance. The following passage shared by Angela, a Brazilian student who has already started teaching English, becomes relevant:

> When speaking a second language, it is really hard to get rid of your accent, and that was something that used to bother me a lot, but after I started teaching English I realized that there was such a beauty in never forgetting where you came from, regardless of the amount of knowledge you may have.

This reflection illuminates the student's journey towards embracing their identity and heritage while navigating the complexities of language learning and bi/multilingualism. By bringing to light that an accent can be a symbol of one's background and experiences that adds richness to communication rather than detracting from it, this student takes pride in their linguistic diversity and encourages others to do the same. Maria, another Brazilian student who teaches Portuguese to speakers of other languages mentioned:

> I teach Portuguese to people from different countries. It's interesting how they bring their identity and, of course, their personal problems. As teachers we have to be prepared to deal with different people and situations, respecting each person individually.

This statement sees the process of language teaching from a different perspective as Maria mentions the experience of teaching Portuguese, and not English, to speakers of other languages. It underscores the importance of adaptability and personalized teaching strategies in a multicultural classroom. By acknowledging that learners bring not only their linguistic identity but also their personal challenges into the classrooms, this reflection refers to the complexity of teaching beyond the language itself. This holistic approach to education ensures that students develop linguistic skills and gain confidence and emotional resilience. It involves appreciating and integrating the diverse backgrounds of students, which can enhance the learning experience by making it more relevant and engaging.

The students' backgrounds and insecurities significantly impact fluency, which is crucial in language learning. Another Brazilian participant, Carine, who is already teaching, expressed:

> As a foreign English learner, I've had different views on what being fluent truly is. I used to associate fluency with pronouncing words exactly like a native does. But if communication is possible, that's what matters. I try my best to raise this awareness in my own students, so that they don't laugh at each other's pronunciation.

This participant builds a conversation between experiences as a student and as a teacher to address the issues of fluency and pronunciation, highly controversial when it comes to ELT approaches. Carine's shift in perspective, from equating fluency with native-like pronunciation to prioritizing effective communication reflects a commitment to building confidence in learners. This quote underscores an approach to language teaching that prioritizes the real-world use of English and intelligibility. It challenges the notion of native-speaker fluency and promotes a more inclusive and respectful language learning environment.

Students began to appreciate that language is about bridging cultural gaps and fostering cultural competency through meaningful societal interactions. This cross-cultural project transcended physical boundaries as TEL facilitated students' development of global competence within the COIL framework. Through collaborative online interactions, they began to better appreciate how cultural, social, and political factors influenced language teaching practices worldwide, fostering a more global mindset in language instruction. In an increasingly interconnected world, this experience allowed students to not only bring the world into their learning but also take their perspectives beyond local boundaries, engaging with global society in meaningful ways.

It is relevant to highlight that the extracts stated in this section illuminate how dialogue with Brazilian students contributed positively to the U.S. pre-service teachers' perspective on language learning. In a world where English is often assumed to be the default medium of communication, students in the U.S. can easily take English for granted and see no clear need to learn another language. The exposure to discussions about accents, fluency, and the emotional complexities of language learning stated by the Brazilian participants equips these future educators with a more nuanced understanding of the challenges their immigrant students may face. This shift in perspective is critical in fostering inclusive classrooms where linguistic differences are celebrated rather than stigmatized, therefore, cultivating confidence, mutual respect, and a sense of belonging.

6. Discussion

This section investigates the transformative role of this kind of collaboration in EPPs based on the data collected and analyzed during this study. Recognizing that the findings of this research are one piece of a larger, evolving dialogue within the multifaceted fields of TEL and COIL, we hope that our work will inspire further exploration into the impact of the synergy between these two curricular approaches on pre-service teacher preparation. As a result, the following subsections will explore the integration of such projects in EPP courses, addressing the three research questions introduced earlier in this paper.

6.1 The impact of TEL and COIL in critical global education

Teacher educators could cultivate future teachers' global dispositions by intentionally and meaningfully integrating opportunities for them to explore the world and consider various viewpoints while engaging in respectful dialogue in the classroom. Hauerwas, Kerkoff, and Schneider (2021) acknowledged that "critical global education retains openings for transformation by engendering transactions in the elements of inquiry, direct experience, intercultural communication, and the creation of participatory learning environments" (p. 187). Critical global education recognizes the transformative power of education in shaping individuals

and societies by encouraging students to critically examine dominant ideologies, power structures, and cultural understandings. Scholars, such as Deardoff (2006), have highlighted the significance of intercultural competence, emphasizing that cultural awareness is not just a foundational element but a dynamic process that enables individuals to engage with and navigate the complexities of diverse cultural perspectives.

The integration of TEL and COIL into pre-service teacher education programs could have a profound effect on expanding students' cross-cultural learning, enabling future educators to view teaching and learning from a global perspective while actively preparing them to create inclusive and culturally responsive learning environments. The pre-service teachers were immersed in COIL environments that afforded them opportunities to interact with peers from different cultural backgrounds. TEL provides platforms for students to engage and reflect with diverse global perspectives. In traditional educational settings, cross-cultural exchanges are often limited by physical distance, language barriers, or lack of access to resources (Rubin, 2022). However, with TEL, students can potentially participate in borderless learning fostering engagement in global learning, where they can interact with other students from different parts of the world to collaborate, share ideas, and learn from each other's lived experiences. TEL may emerge as a powerful catalyst for transformative education, reshaping how we think about teaching, learning, and the global exchange of ideas. COIL introduces students not only to new ways of thinking and learning but also may encourage them to appreciate cultural differences while confronting their cultural assumptions and biases (Rubin, 2017). TEL and COIL offer innovative approaches to exploring power and linguistic diversity by creating virtual spaces for reflection and dialogue.

6.2 The approach to power dynamics and cultural perspectives in education

Participation in the COIL project promoted reflections on power dynamics and the cultural perspectives in education, highlighting the interconnectedness of language teaching with broader social and cultural structures. It is relevant to highlight that when it comes to English and its current status as an international language, it has a main role in influencing power dynamics. For example, educators and students could reflect on how certain languages are privileged over others in global systems, and how this affects individuals' learning of belonging. That said, engagement in respectful cross-cultural dialogue while communicating in English demands awareness of positions and attitudes.

The pre-service teachers potentially began to critically rethink language education, shifting their focus from addressing not only the technical aspects of language learning but also realizing how sociocultural factors influence communication. According to Hossain (2023), "it is not just about learning words; it is about understanding the cultural context that gives those words life (p. 2). This shift has the possibility to foster greater awareness of how language intersects with culture, power, and identity. Across Brazilian and U.S. contexts, the project demonstrated a shared commitment to challenging traditional hierarchies and embracing cultural diversity as a strength. Through such efforts, teachers could truly become agents of equity and inclusion, paving the way for a more empathetic and just educational landscape. The insights reinforce the transformative potential of COIL initiatives in preparing educators to lead inclusive classrooms that reflect and respect the complexities of a globalized world.

6.3 The changes of perspective regarding language learning

The data analysis highlighted the potential of the methodologies based on students' reflections. When students understand the importance of embracing all dimensions of language use, beyond just linguistic forms and norms, it likely deepens their understanding of language teaching and learning. Rethinking language education also means acknowledging that language is not simply a set of prescriptive or static rules but a social tool that influences identity, power, and access to knowledge. For both native and non-native speakers of English, the main approach for mutual understanding should be rooted in functional effectiveness, thus fostering a more inclusive language education. Language education must move beyond the linguistic hegemony of 'correctness' that often marginalizes non-standard dialects and regional languages but rather adopt an approach that understands and values the richness of linguistic diversity. Embracing linguistic diversity respectfully is a behavior based on global competencies and the ability to perform linguistic adaptations accordingly. By recognizing the social dynamics embedded in language, educators could challenge hegemonic practices by highlighting the ways language shapes social realities, helping students develop a more reflexive and inclusive approach to language use.

Students are living in a linguistically diverse and interconnected world. Language is an essential part of their everyday life, serving as a vehicle for their interactions with others and the world. From popular culture and technology to the economy, politics, and education, language use shapes who we are and how we are treated. Understood as a social

https://doi.org/10.21428/8c225f6e.2792a1cc

practice, language use is not only about conveying information but is also a dynamic process that shapes and is shaped by social interactions and cultural contexts. Language, therefore, is inherently cultural. It reflects the values, norms, and identities of communities, serving as both a means of building relationships and fostering–or hindering–intercultural understanding. As Hossain (2023) notes, by embracing this comprehensive approach to language teaching, educators can create enriching classroom experiences and ensure their practice remains relevant in response to the evolving dynamics of the global landscape.

7. Conclusion and recommendations

By adopting a critical theory approach, we explored the power dynamics within cross-cultural, technology-mediated interactions, particularly regarding language hierarchies between native and non-native English speakers. The study involved Brazilian ELT undergraduate students who engaged in the project, benefiting not only from its core objectives but also from the added advantage of a language learning experience. Based on the findings of this study, several conclusions can be drawn.

Firstly, TEL and COIL played a crucial role in enhancing students' cross-cultural learning, effectively preparing them to teach in diverse, multicultural classrooms. In terms of digital collaboration, digital technologies and the ability to use them intentionally can scaffold impactful co-creation of knowledge. The practical implementation of COIL projects reported in this article demonstrates that "for the purpose of IaH implementation, the use of technologies for interactive collaboration among students from different countries, within a formal curriculum, with the constant intervention of educators, is seen as a token of good practice" (GUIMARÃES et al, 2019, p.103). Students in the virtual exchange expressed appreciation for a borderless opportunity to engage in cultural identity reflection of themselves and others. Many students began to realize how beneficial and feasible it was to incorporate global understanding into the course assignments, activities, and dialogue.

Secondly, students explored power dynamics and cultural perspectives in a TEL environment that allowed them to value diverse perspectives and funds of knowledge (Moll, 1994). They began to cultivate a more inclusive mindset that recognizes the complexity of education globally. This mindset can then impact how teachers create inclusive and culturally responsive classrooms, ultimately benefiting their future students. In today's interconnected world, perspective-taking is an essential global competence that enables individuals to understand and appreciate diverse viewpoints, cultures, and experiences.

Lastly, through their participation in the cross-cultural project students redefined their approach to language education by gaining valuable global teaching insights. The internationalization of education holds great potential for fostering intercultural dialogue. Institutions can implement a range of strategies, from promoting geographical mobility opportunities to incorporating global perspectives on campus. Faculty play a key role in guiding students and embedding global learning activities into the curriculum. In this context, IaH is seen as a more democratic and inclusive practice because it allows for a higher number of participants with lower investment. By leveraging TEL, faculty can re-center global education in educational spaces and create an environment conducive to nurturing students' global dispositions within the framework of COIL. This way, faculty can make use of technology to enhance language learning through collaborative work beyond borders. COIL projects can offer a fertile ground for the development of global competencies as well as contextualized practice and real conditions for students' productions and comprehension development within language learning.

7.1 Limitations and future research

The main aim of this case study was to explore how TEL and COIL can be effectively used to enhance the preparation of ELT professionals and educators more broadly. The analysis of the pre-service teachers' contributions to the project demonstrated that TEL could scaffold opportunities for international collaborations promoting content learning as well as language learning based on real interactions. Integrating COIL and TEL projects into teacher education curricula can provide students with sustained exposure to cross-cultural collaboration and digital teaching tools.

The findings of this study highlight the transferability of integrating TEL and COIL into EPPs. The successful implementation of these approaches in enhancing ELT preparation demonstrates their broader applicability in diverse educational contexts. TEL not only supports content learning but also enriches language acquisition. Incorporating COIL and TEL into teacher education curricula offers a scalable model for providing students with ongoing opportunities for cross-cultural collaboration and digital tool proficiency, preparing them for the increasingly interconnected and technology-driven teaching landscape.

However, it is important to emphasize the cultural considerations that accompany the use of technology in education, as these factors can significantly impact the effectiveness of TEL. For example, internet access may not be universally available, which can hinder students' ability to fully participate in online learning activities. Additionally, language barriers can complicate communication and understanding, especially when educational materials or platforms are predominantly in a language that may not be a student's first language, thus affecting comprehension and engagement. Lastly, students can have varying digital literacies impacting their ability to effectively navigate digital platforms, utilization of online tools, or engage in collaborative online environments. Another limitation is that we only included Brazilian pre-service English teachers and U.S. pre-service K-12 teachers, thus we may not have fully captured the diversity of experiences within each country's teacher education programs. Future research could benefit from a larger, more diverse sample that includes teachers from different subject areas or participants from additional counties, allowing a more comprehensive exploration of cross-cultural dynamics in teacher education.

7.2 Conclusion

The data analysis demonstrated that the interconnected collaboration between Brazilian and U.S. cohorts provided both sides with a fertile ground for linguistic improvements, alongside the development of other competencies and the co-creation of knowledge. To the extent that this linguistic scenario challenged the non-native pre-service English teachers from the Brazilian language teacher education program, it also reached and contributed positively to the EPP in the USA. As schools around the world face the inclusion of immigrants and language diversity in classrooms, the preparation of future teachers needs to embrace the novelties of the context and provide future professionals with competencies and a positive attitude towards the non-native speakers' necessities. This experience aims to demonstrate that technology has the potential to enhance this learning process providing educators with resources and opportunities to implement intercultural dialogue, promote linguistic learning, and develop global competence.

As the project embraced Brazilian pre-service teachers and a Brazilian teacher educator, whose native language is not English, we would like to celebrate the intrinsic linguistic diversity of the activities by bringing the following quote, "*A educação se torna significativa quando é colaborativa, quando os alunos constroem conhecimento com o outro, com a mediação de professores e, muitas vezes, com o auxílio das tecnologias digitais. [...] As tecnologias, quando usadas intencionalmente, possibilitam que o aprendizado seja mais conectado com a realidade e com o mundo*" [1] (Moran, 2018, p. 34). The quote highlights the dialogical nature of education and supports the educational relevance of TEL and the online collaborative learning environment where both teachers and students contribute to each other's growth through borderless real-world engagement.

References

Anzai, Y., & Shimizu, H. (2022). Challenges and opportunities of COIL for foreign language education. *International Journal for Educational Media and Technology, 16*(2), 46–54.

Atkinson, W. (2025). Field theory, role theory, and role conflict: Reappropriating insights from the past. *Journal of Classical Sociology, 25*(1): 3-19. https://doi.org/10.1177/1468795X2312084

Beelen, J., & Jones, E. (2015). Redefining internationalization at home. In A. Curaj, L. Matei, R. Pricopie, J. Salmi, & P. Scott (Eds.), *The European higher education area: Between critical reflections and future policies* (pp. 59-72). Springer Netherlands. https://doi.org/10.1007/978-3-319-20877-0_5

Boix Mansilla, V. (2016). How to be a global thinker. *Educational Leadership, 74*(4), 10-16.

Calvo, L. C. S. Hartle, L. C. (2024). Virtual exchange in teacher education programs from Brazil and USA: outcomes and challenges. *Texto Livre*, 17(e47921). https://doi.org/10.1590/1983-3652.2024.47921

Choo, S. S. (2021). *Teaching ethics through literature: The significance of Ethical Criticism in a global age.* Routledge.

Cookies, B. (2022, November 13). *To the girl in English class by Hafsat Abdullahi.* [Video]. Youtube. https://www.youtube.com/watch?v=D0dwqlnzOdY

Creswell, J.W. (2013). *Qualitative inquiry & research design: Choosing among five approaches.* Sage.

1 "Education becomes meaningful when it is collaborative, when students build knowledge with each other, with the mediation of teachers, and often with the help of digital technologies. [...] Technologies, when used intentionally, enable learning to be more connected to reality and the world."

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches.* Sage.

Davies-Vollum, K. S., Ribchester, C., Danso-Wiredu, E. Y., & Raha, D. (2023). Virtual mobility to enhance intercultural competences for a more sustainable future. *Innovations in Education and Teaching International, 61*(5), 833-847. https://doi.org/10.1080/14703297.2023.2224770

Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of studies in international education, 10*(3), 241-266.

Flores, N. & García, E. S. (2020). Power, language, and bilingual learners. In N.S. Nasir, C.D. Lee, R. Pea, and M.M. de Royston (Eds.), *Handbook of the cultural foundations of learning.* (pp. 178-191).

Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice.* Teachers College Press.

Gokcora, D. (2021). Benefits of collaborative online international learning projects. *Academia Letters,* Article 202. https://doi.org/10.20935/AL202.

Guimarães, F. F., Mendes, A. R. M., Rodrigues, L. M. Paiva, R. S. dos S. & Finardi, K. R. (2019). Internationalization at home, COIL and intercomprehension: For more inclusive activities in the global south. *Simon Fraser University Educational Review Journal*, 2(3). 89-103 https://journals.lib.sfu.ca/index.php/sfuer/issue/view/64/41

Hackett, S., Dawson, M., Janssen, J., & Tartwijk, J. (2024). Defining collaborative online international learning (COIL) and distinguishing it from virtual exchange. *TechTrends*. https://doi.org/10.1007/s11528-024-01000-w

Hackett, S., Janssen, J., Beach, P., Perreault, M., Beelen, J., & van Tarwijk, J. (2023). The effectiveness of Collaborative Online International Learning (COIL) on intercultural competence development in higher education. *International Journal of Educational Technology in Higher Education, 20*(5). https://doi.org/10.1186/s41239-022-00373-3

Hauerwas, L.B, Kerkhoff, S.N. & Schneider, S. B. (2021) Glocality, reflexivity, interculturality, and worldmaking: A Framework for critical global teaching. *Journal of Research in Childhood Education, 35*(2), 185-199. https://doi.org/10.1080/02568543.2021.1900714

Holliday, A. (2017). Recognising what English language students bring to the classroom: Autonomy, authenticity and Web 2.0. Canterbury: Christ Church University. https://adrianholliday.com/wp-content/uploads/2017/01/web2.17.pdf

Hossain, K. I. (2023). Reviewing the role of culture in English language learning: Challenges and opportunities for educators. Social Sciences & Humanities Open, 9, 1-10. https://doi.org/10.1016/j.ssaho.2023.100781

Hudzik, J. K. (2011). Comprehensive Internationalization: From concept to action. Washington D.C.: NAFSA: Association of International Educators.

Huertas-Abril, C. A., & Palacios-Hidalgo, F. J. (2024). Collaborative international online learning for the development of intercultural awareness: An experience with pre-service language teachers. *Journal for Multicultural Education, 18*(1/2), 67–80. https://doi.org/10.1108/JME-09-2023-0093

Hülmbauer, C., Böhringer, H., & Seidlhofer, B. (2008). Introducing English as a lingua franca (ELF): Precursor and partner in intercultural communication. *Synergies Europe, 3*, 25-36. https://gerflint.fr/Base/Europe3/hulmbauer.pdf

Kincheloe, J. L., & McLaren, P. L. (2005). Rethinking critical theory and qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 303-342). Sage.

Jones, S. R., Torres, V., & Arminio, J. (2006). *Negotiating the complexities of qualitative research in higher education: Fundamental elements and issues*. Routledge.

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice, 31*(2), 132-141.

Moran, J. (2018) Metodologias ativas para uma aprendizagem mais profunda. In Moran, J., & Bacich, L. (Orgs.). *Metodologias ativas para uma educação inovadora: Uma abordagem teórico-prática*. (Vol.1), 35-38.

OECD/Asia Society. (2018). *Teaching for Global Competence in a Rapidly Changing World.*

OECD Publishing, Paris/Asia Society, New York. https://doi.org/10.1787/9789264289024-en

Parmigiani, D,. Jones, S.L., Kunnari, I. Nicchia, E. (2022). Global competence and teacher education programmes. A European perspective, Cogent Education, 9:1, 2022996, DOI: https://doi.org/10.1080/233118 6X.2021.2022996

Richards, J. C. (2015). *Key issues in language teaching*. Cambridge University Press.

Rubin, J. (2017) Embedding Collaborative Online International Learning (COIL) at Higher Education Institutions. *Internationalisation of Higher Education* (Vol. 2), 27-44.

Rubin, J. (2022). Preface to an evolving International Education Landscape. In Rubin, J., & Guth, S. P. (Eds.). *The Guide to COIL virtual exchange: Implementing, growing and sustaining collaborative online international learning*. Routledge.

Selvi, A. F., Galloway, N., & Rose, H. (2024). *Teaching English as an International Language*. Cambridge: Cambridge University Press.

Tierney, W.G., & Rhoads, R.A. (2004). Postmodernism and critical theory in higher education: Implications for research and practice. In. J.C. Smart (Ed.), *Higher education: Handbook for theory and research* (Vol. 9). Agathon Press.

Vázquez-Villegas, P., Gómez-Guerrero, D., Mejía-Manzano, L.A., Gisselle Morales-Veloquio, G., Montaño-Salinas, L.P. & Membrillo-Hernández, J. (2024). Evaluation of good practices and opportunity areas of a Collaborative Online International Learning (COIL) program: Global shared learning classroom. *Education and Information Technologies, 29,* 22247–22286. https://doi.org/10.1007/s10639-024-12739-3

Wexler, L. J., & Hinojosa, D. M. (2017). Beliefs and perceptions about their preparation to teach English language learners: Voices of mainstream pre-service teachers. *International Journal of TESOL and Learning, 6*(3 and 4), 41–61.

Wimpenny, K., Finardi, K. R., Orsini-Jones, M., & Jacobs, L. (2022). Knowing, being, relating and expressing through third space Global South-North COIL: Digital inclusion and equity in international higher education. *Journal of Studies in International Education, 26*(2), 279–296. https://www.researchgate.net/publication/360741349_Knowing_Being_Relating_and_Expressing_Through_Third_Space_Global_SouthNorth_COIL_Digital_Inclusion_and_Equity_in_International_Higher_Education

Zeng J, Ponce, A.R. & Li, Y. (2023) English linguistic neo-imperialism in the era of globalization: A conceptual viewpoint. *Frontiers in Psychology, 14*, 1149471. doi: 10.3389/fpsyg.2023.1149471

https://doi.org/10.21428/8c225f6e.2792a1cc

Acknowledgements

We would like to acknowledge the generous support of the Longview Foundation for awarding Christina Wright Fields the Global Teacher Education Fellowship which significantly contributed to the success of this research. Also, we would like to acknowledge iEARN KOSKO for connecting us as COIL facilitators for this project.

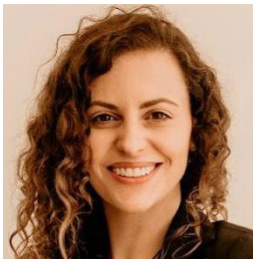
About the authors



Christina Wright Fields, PhD

Christina Wright Fields, PhD (Poughkeepsie, New York) is an Associate Professor of Education at Marist University. Dr. Fields' research focuses on culturally responsive pedagogy, urban education, equitable administrative practices, and global education. Prior to joining Marist University, Dr. Fields oversaw a pre-college global infusion project at Indiana University Bloomington with Dr. Amy Horowitz. Dr. Fields received the 2022 Longview Foundation Global Teacher Education Fellowship, 2019 Marist College Strategic Plan Grant–Think Global, Act Local: Developing Social Justice Minded Youth, and 2017 NASPA Program Excellence Award in International, Multicultural, Cultural, Gender, LGBTQ, Spirituality and Disability. Dr. Fields served as 2022–2024 co-chair for American Association of Colleges of Teacher Educators (AACTE) Global Diversity committee and was a member of AACTE's Global Teacher Education Professional Learning Community. Currently, she serves as a Collaborative Online International Learning (COIL) coordinator at Marist University and the co-chair for the American College Personnel Association (ACPA) Commission for Academic Affairs. Dr. Fields has presented at American Education Research Association (AERA), International Conference on Urban Education (ICUE), International Visual Sociology Association (IVSA), Critical Race Studies in Education Association (CRSEA), and American Association of Colleges of Teacher Educators (AACTE). She has published in *Administration Theory & Praxis, Public Integrity, Journal of African American Women and Girls in Education, and Journal of Education Human Resources*.

christina.fields@marist.edu 0000-0001-8093-6068



Jancileidi Hübner

Jancileidi Hübner is a Brazilian teacher educator at the Institute of Humanities, Science, Education, and Creativity at *Universidade de Passo Fundo* (UPF), Brazil. She is also an English teacher at the Language Center of *Universidade Regional Integrada do Alto Uruguai e das Missões* (URI) in Erechim. Her two decades of experience teaching English to Brazilian students have equipped her with practical knowledge which informs her work in teacher education. She holds a Master's degree in Linguistic Studies and has specialized in the intersection of language, technology, and education. Her research and practice focus on the affordances of technology in the context of critical language teaching and internationalization at home. She is interested in global education and cross-cultural communication and has facilitated Collaborative Online International Learning (COIL) projects for pre-service teachers and secondary students. She has shared her work at various conferences, including the Brazilian Association of International Education (FAUBAI) and the American Association of Colleges for Teacher Education (AACTE).

jancileidi@upf.br 0000-0002-1195-9087

Open Access (CC BY 4.0)

© 2025 The Authors. This article is distributed under Creative Commons Attribution 4.0 International licence.

You are free to

- Share — copy and redistribute the material in any medium or format
- Adapt — remix, transform, and build upon the material for any purpose, even commercially.

Under the following terms:

- Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

The full licence conditions are available at: **https://creativecommons.org/licenses/by/4.0/**

https://doi.org/10.21428/8c225f6e.2792a1cc

Appendix A: Prompts for student reflections

Prompt 1

Describe yourself or your inspiration for education using 3 words. As you ponder your 3 words, choose words that are significant to you. Please explain your word choice. Share your response on this Padlet with our Brazilian classmate.

Please engage in dialogue with colleagues regarding their posts.

Prompt 2

In this video, Hafsat Abdullahi [2] expresses herself as a non-native learner of English. She raises awareness about language learning, identity, and power. This TEL/virtual exchange involves native and non-native speakers of English, which is a great opportunity for us to reflect on English as a language spoken around the world.

Based on what you have already studied and your perspective, choose a quotation you consider relevant to this discussion and share it with your group by recording your voice while you read it on our Padlet. Let your accent show the beauty of variety and acceptance.

Please engage in dialogue with colleagues regarding their posts.

Prompt 3

Please raise your questions about education systems in Brazil and USA for more discussions, welcome to do some compare and contrast! Do you have questions about K-12? Post-secondary education? College preparation? Co-curricular activities/ student organizations? Governance/campus structure? Teacher preparation (courses, certification, advising)?

Share your response on this Padlet with our Brazilian classmate. Please engage in dialogue with colleagues regarding their posts.

2 https://www.youtube.com/watch?v=D0dwqlnzOdY