

## FROM A VIRTUAL TO A HYBRID MODEL OF INTERNATIONALIZATION: A CASE STUDY IN A HIGHER EDUCATION INSTITUTION

DO MODELO VIRTUAL DE INTERNACIONALIZAÇÃO PARA O HÍBRIDO: UM ESTUDO DE CASO DE UMA INSTITUIÇÃO  
DE EDUCAÇÃO SUPERIOR

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**ABSTRACT:** The use of information and communication technologies (TICs) supported the transition from face-to-face to digital learning environments as a response to the pandemic moment, fostering the development of Virtual Internationalization (VI). This research aims to investigate what actions the Federal University of Santa Catarina (UFSC) took to avoid the interruption of internationalization activities by the development of Virtual Internationalization. It is a case study with a descriptive objective, using bibliographic and documental research. The results indicated three axes of institutional actions inducing Virtual Internationalization: i. campus internationalization based on online courses offered in foreign languages; ii. curriculum internationalization guidelines for developing Collaborative Online International Learning programs; iii. online foreign language capacity-building programs to set the internationalization for all. The research highlights the need to establish policies and institutional plans for Virtual Internationalization with the same relevance as other management plans.

**KEYWORDS:** Internationalization of Higher Education; Virtual Internationalization; Information and Communication Technologies; Collaborative Online International Learning; Hybrid Internationalization

**RESUMO:** A utilização das tecnologias de informação e comunicação (TICs) deu suporte à transição dos ambientes presenciais aos digitais como resposta ao momento pandêmico, fomentando o desenvolvimento da Internacionalização Virtual (VI). Esta pesquisa objetiva investigar quais ações foram tomadas pela Universidade Federal de Santa Catarina (UFSC) para evitar interrupções nas atividades de internacionalização pelo desenvolvimento da Internacionalização Virtual. Trata-se de um estudo de caso com objetivo descritivo, utilizando pesquisa bibliográfica e documental. Os resultados indicaram três eixos de atuação institucional indutora da Internacionalização Virtual: i. internacionalização do campus com base em cursos online oferecidos em línguas estrangeiras; ii. diretrizes de internacionalização curricular para o desenvolvimento de programas de Aprendizagem Internacional Colaborativa Online; iii. programas online de capacitação em língua estrangeira visando a internacionalização para todos. A pesquisa destaca a necessidade de estabelecer políticas e planos institucionais à Internacionalização Virtual com a mesma relevância dos demais planos de gestão.

**PALAVRAS-CHAVE:** Internacionalização do Ensino Superior; Internacionalização Virtual; Tecnologias da Informação e da Comunicação; Collaborative Online International Learning; Internacionalização Híbrida

## INTRODUCTION

The internationalization of Higher Education is usually related to academic mobility or cross-border education, whereby students and lecturers have experiences involving different cultures, countries, and Higher Education Institutions (HEIs) around the world (Stallivieri, 2017a). The competitive advantage of HEIs is one of the focuses of internationalization, trying to adapt institutional actions to the external environment (Belfort et al., 2019).

However, considering globalization, internationalization overcomes this initial conception and embraces some different actions. Knight (2021) compares Internationalization at Home (IaH) and cross-border: IaH could involve international and intercultural dimensions in the teaching, learning, researching, and extracurricular processes and local partnerships based on cultural experiences; cross-border internationalization, in turn, represents mobility programs, and beyond that, sometimes it aims commercial partnerships.

Regardless of the internationalization model or concept, communication, through the use of languages, is the guiding thread that sustains all internationalization manifestations. It serves as the primary tool for the persons socialization and cultural integration. It contains many representations and values upon which a society bases its conception of reality and sense of self. The aspects of language and its social representations are likely the most crucial in the construction of collective identities since it is through discourse that the group formulates its unity and creates an image of itself through differences from other groups. It is considered the most valuable tool for any and all kinds of internationalization models, especially highlighted when using information and communication technologies (ICTs).

ICTs have completely changed how we conduct our lives today. The term "ICT" is currently in use throughout the world to characterize emerging technologies that these days heavily rely on computers. Based on contemporary definitions and considering the evolution of technology, it is possible to identify a new concept of HEIs internationalization, as discussed by Stallivieri and Vianna (2021). The authors affirm the existence of a new model that goes from face-to-face to digital environments, called Virtual Internationalization (VI). The connections among students, professors, and researchers from HEIs spread all over the world using ICTs allow the application of this model to guide HEIs to handle contemporary demands such as quality assurance.

Hence, HEIs are looking for paths to conquest high positions on international rankings, such as the Federal University of Santa Catarina (UFSC), located in the south of Brazil, which is seeking a position as a recognized international institution. After more than six decades, UFSC is now immersed in an irreversible context where the technology era and virtual education are expanding to assist the

needs of the academic community, which is giving great value to international partnerships. Aiming to understand this situation, a research question emerges: What is the Federal University of Santa Catarina doing to be inserted in Virtual Internationalization? For this reason, this research aims to analyze the actions developed by UFSC to maintain its internationalization process without interruption and comprehend the new process related to Virtual Internationalization.

The advance of international academic connections boosted international cooperation and researchers' associations worldwide. HEIs are creating and maintaining partnerships that permit educational experiences exchange, as UFSC does, counting on the support of the International Relations Office (SINTER), which coordinates institutional internationalization, specifically considering this scenery of Virtual Internationalization. Furthermore, it is necessary to consider the current global context affected by Covid -19 that forced HEIs to keep working using ICTs. The pandemic has stimulated universities to find ways to maintain and expand international academic activities, counting on virtual tools.

As a research contribution, understanding how UFSC plans and implements actions related to VI is relevant to verify the institutional engagement for internationalization. Sharing good practices that can be adopted by other HEIs will be considered. The access to UFSC data and available information through the website made this research achievable.

This paper is structured by this introduction, which contextualizes the research theme and the research goal. In the sequence, the theoretical foundation and the methodology applied are described. Data from the research is presented and discussed, followed by final considerations.

## VIRTUAL INTERNATIONALIZATION

Virtual Internationalization (VI) represents a set of innovative actions that engage the academic community (students, faculty members and staff) in a Higher Education context. Thus, VI involves virtual exchanges using innovations in an international scenery through communication and learning (Lima, Bastos & Varvakis, 2020). In this context, ICTs were essential elements, which have been used in many countries to enable academic activities (Zass, 2022).

The transition of higher education internationalization from face-to-face to digital environments has emerged as one of the primary responses to the COVID-19 lockdowns (Stallivieri, 2020). Stallivieri affirms that internationalization has been virtualized and the implementation of "Virtual Exchange," a designation that refers to educational programs that employ technology to enable geographically separated people to engage, communicate, and build global abilities, is one of the already-established approaches.

On this perspective, Bruhn (2021, p.1003) analyses the importance of VI:

The global online teaching and learning surge calls for comprehensive theoretical approaches related to digitalization and internationalization, which could help higher education institutions, faculty, and practitioners make the most of digital tools and technologies.

Considering the importance of ICTs, faculty assistance and involvement is essential for the Virtual Internationalization program to be implemented successfully and to provide high-quality instruction (Alqahtani, 2018). VI, through ICTs, includes a pack of actions as virtual mobility, virtual exchanges, Collaborative Online International Learning (COIL), foreign language programs that will be discussed as follows.

### INTERNATIONAL MOBILITY PROGRAMS – CONCEPTS AND CHARACTERISTICS

International mobility programs could be considered the first step to promote international cooperation and mainly cultural integration, in other words, “the process of infusing or embedding the international and intercultural dimension into policies and programs to ensure that the international dimension remains central, not marginal, and is sustainable” (Knight, 2004, p. 12). The mobility programs for international students offer uncountable opportunities of learning but, at the same time, trigger many challenges related to academic, sociocultural, and psychological adaptation (Oliveira & Freitas, 2017).

According to Dabney-Fekete & Dora (2020), international academic mobility represents activities that involve teaching and/or researching experiences (over days or months and promoting professional increase for students and faculty, individually or collectively) and the establishment of international networks and cooperations. This new scenery was reinforced since the Bologna Process (1999), which promoted HEIs’ academic restructuring (new academic requirement) to enable international mobility (Masri, 2017).

Based on a review of short-term international student mobility programs, Roy et al (2019) verified that there are three fundamental areas which structure this phenomenon: cultural outcomes, personal outcomes and employment and career outcomes. Table 1 introduces this conception.

**Table 1:** Short-term international student mobility areas.

Cultural Outcomes	Cultural awareness; cultural intelligence; global mindedness; cultural sensitivity and empathy; cultural adaptability; language skills; cross-cultural communication skills; intercultural competence; other cultural outcomes.
Personal Outcomes	Moral and ethical issues enable students to learn more about themselves and enrich them personally.
Employment and Career Outcomes	Professional development; perceived employability; career choices; transition into international careers; career success; other employment and career outcomes.

**Source:** developed by the authors based on Roy et al. (2019).

The package of characteristics involving international mobility shows contributions to personal and professional growth, mainly, regarding cultural and communicative experiences. Although, Knight (2007) refers to academic mobility as cross-border and highlights changes in this process of academic internationalization. The author affirms that new categories of service providers, cooperative relationships, delivery methods, and honors and credentials have all been given out. To describe cross-border mobility programs, Knight (2007) features some typologies as presented on Table 2, already drawing attention to the possibility of virtual/distance cross-border mobility.

**Table 2:** Cross-border mobility programs typologies

Typology	Description
Franchise	An arrangement whereby a provider in source Country A authorizes a provider in Country B to deliver its course/program/service in Country B or other countries.
Twinning	A situation where a provider in source Country A collaborates with a provider located in Country B to develop an articulation system that allows students to take course credits in Country B and/or source Country A. Only one qualification is awarded by provider in source Country A.
Double/Joint Degree	An arrangement whereby providers in different countries collaborate to offer a program for which students receive qualifications from both providers, and a joint award from the collaborating partners.
Articulation	Various types of articulation arrangements between providers situated in different countries permit students to gain credit for courses/ programs offered by all the collaborating providers.
Validation	Validation arrangements between providers in different countries allow Provider B in receiving country to award the qualification of Provider A in source country.
Virtual/Distance	Arrangements where providers deliver courses/programs to students in different countries through distance and online modes. This may include some face-to-face support for students through domestic study or support centers.

Source: Knight (2007, p. 137-138).

The new pandemic scenery caused by Covid-19 changed drastically the international mobility in terms of face-to-face students and faculty contacts introducing them to virtual experiences such as Virtual Mobility and to Virtual Exchange. Presential international mobility shifted to virtual mode and this scenery boosted the necessity of continuing the development of international competences and talents in HEIs. It is directly impacted by Internationalization at Home (IaH), a developing idea in the internationalization of higher education (Sun, 2019).

Furthermore, the two factors that encourage students to take part in international academic mobility programs the most are still the opportunity to learn about another culture and the potential to speak a foreign language. The success of an overseas experience –virtual or on campus – depends on the students' great appreciation and understanding of language role and cultural differences. These elements are connected to the fact that they have developed open lines of communication with other people, have built lasting friendships, are familiar with other people's cultures, and are aware of a wide range of cultural values that are distinct from their own values (Stallivieri, 2017). They accept the fact of being different, being well known for it and are eager to interact with people from other cultures, either face-to-face or virtually, which widens the possibilities to internationalize HEIs campuses.

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## CAMPUS INTERNATIONALIZATION

The concept of campus internationalization, Internationalization at Home (IaH) or even domestic internationalization became popular in the 90's (Nez & Morosini, 2020). IaH means the use of current resources for high-quality international education. These resources are international scholars, international students, foreign textbooks, cross-border projects, diverse courses, international conferences, etc., by colleges and universities to create an international campus with local characteristics and to give students opportunities to interact with others from around the world (Sun, 2019).

Considering that Covid-19 results in unmeasured global impacts, the first reflection could be identified in the academic context: mobility, incoming and outgoing, drastically went down and probably returns to lower levels as previously (Nez & Morosini, 2020). This scenery resulted in loss of academic mobility opportunities and has offered HEIs the chance to create and implement new internationalization strategies that support higher education students improve intercultural and international learning without the requirement for physical relocation (González, 2020). In the face of it, IaH represents a strategy to maintain mobility activities.

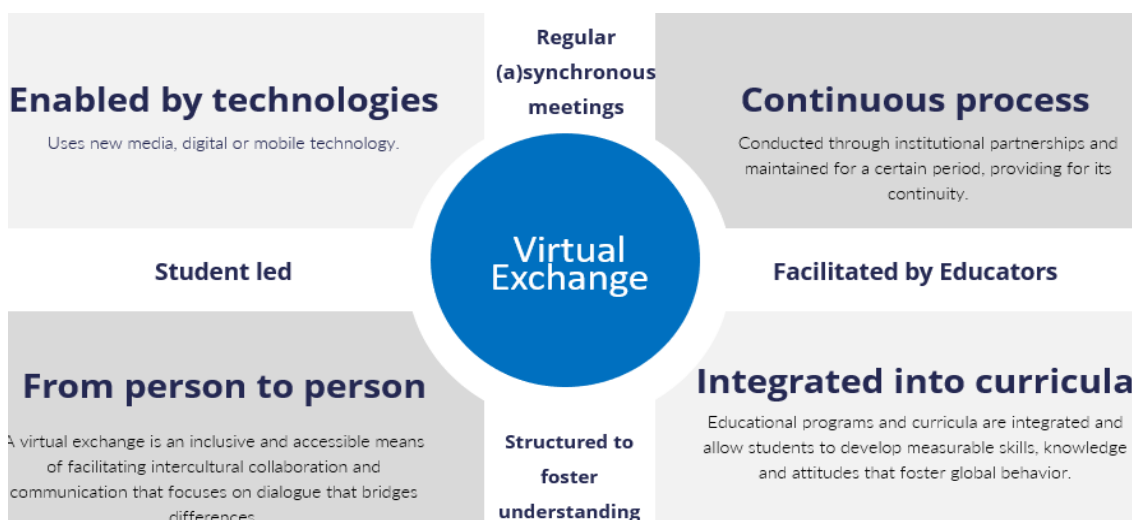
Even though many HEIs continue focusing on mobility as the most important internationalization strategy. It is in part because mobility is simple to evaluate using numbers, percentages, and targets, since for the rankings of universities on a national, regional, and international level, measurable targets are necessary (De Wit & Leask, 2015). De Wit and Leask highlighted that the Bologna signatory countries' education Ministers set ambitious targets, but even if they are achieved, only a small number of students will be able or willing to study abroad. This emphasizes the significance of the "at home" component of internationalization, which focuses on the results of internationalized learning for all students rather than the mobility of the minority instead of looking at the outcomes, impact, and quality of internationalization.

While mobility or internationalization overseas remain to dominate internationalization policies globally, reaching only a very tiny percentage of students, professors, and staff, internationalization of the curriculum at home is receiving more attention (De Wit, 2020). From this perspective, IaH has become a significant strategy for international institutions to maintain and expand academic activities since Covid-19 crisis, especially considering the possibility to study in virtual environments with the use of ICTs. Some of the possibilities to be considered are the offer of Virtual Exchange (VE) programs.

## VIRTUAL EXCHANGE

According to the definition used by EVOLVE<sup>120</sup> (Evidence-Validated Online Learning through Virtual Exchange) program (EVOLVE, 2022), Virtual Exchange (VE) is a practice, supported by research, that consists of sustained, technology-enabled, people-to-people education programs or activities in which constructive communication and interaction takes place between individuals or groups who are geographically separated and/or from different cultural backgrounds, with the support of educators or facilitators. Virtual Exchange combines the deep impact of intercultural dialogue and exchange with the broad reach of digital technology.

Figure 1: Virtual Exchange



Source: Stallivieri, 2020.

## ENGLISH AS A MEDIUM OF INSTRUCTION (EMI)

As stated by Stallivieri (2017), one must speak the language, live in it, and view the world from its perspective to understand it. Moving from one language to another involves more than just exchanging vocabulary and sentence patterns; it also involves thinking and acting in accordance with a different culture. Therefore, language is the medium through which the reality of the world is communicated, and each language emphasizes how an individual interacts with the world and its cultures.

In this century, English is the language that most people use for socializing, learning, working, and communicating and people are used to refer to this as internationalization. The abilities needed by lecturers had been evaluated and updated because of globalization and the adoption of English

120 EVOLVE (Evidence-Validated Online Learning through Virtual Exchange) was conducted as a project to mainstream Virtual Exchange (VE) as an innovative form of collaborative international learning across disciplines in Higher Education (HE) institutions in Europe and beyond.

as a Medium of Instruction (EMI), raised more questions about how to handle the transition from English as a Foreign Language to EMI (Dafouz & Camacho-Miñano, 2016).

According to Kim (2020), there are two benefits of using EMI in non-English speaking nations. First, students might experience an improvement in their English language proficiency, which is frequently necessary to secure a job at a multinational corporation and some students might even pursue professions abroad using their foreign language abilities; second, it supports local universities' efforts to go global, giving them a chance to compete with institutions around the world and draw in international students.

Offering English-language classes can also persuade exchange students who struggle with language barriers to consider local universities, which will increase the number of international students attending nearby universities (Kim, 2020). Suleman, Sheikh, Ali, Ali & Rahim (2019) investigated the perceptions of the primary school teachers about induction, fortification, and primacy of the EMI in Vehari District, Pakistan. The conclusion is that mastering the English language is essential for success in the field of education, but they also see English as a barrier to academic success when used as a teaching tool. The replies of teachers regarding fluency in English language are indicative of this barrier.

Compared to other countries and contexts, the decision to choose English as a language of teaching in Malaysia is typically influenced by political and practical considerations. Here, language policies have been set into place to qualify Malaysia's future population for the status of an industrialized nation and, eventually, for the migration into a knowledge economy where English is widely used (Goh & Luen Loy, 2021).

The Brazilian Association of International Education (FAUBAI) created a document to offer guiding proposals for the linguistic policy of internationalization of higher education in Brazilian institutions since it was aware of the significance that languages have been acquiring in achieving a more inclusive and potential internationalization. The guidelines are intended to serve as a guide and support the international relations departments of the affiliated institutions in developing and implementing a language policy that meets the aspirations of the academic communities' internationalization while respecting the autonomy of the languages that will make up each reality (FAUBAI, 2017). The document suggests principles that can consider the “diversity and uniqueness of the various fields of knowledge as well as the other languages that help them accomplish their goals when considering an inclusive internationalization process which should be aspired to by all higher education institutions” (FAUBAI, 2017).



The more the HEIs invest in the development of language policies the better the internationalization process progresses, and the use of TICs can help the introduction of Virtual Internationalization and induce to a larger offer of courses in programs to strengthen curriculum internationalization.

## INTERNATIONALIZATION OF CURRICULUM (IOC)

Forward-thinking institutions aim to increase the relevance and interest of the formal and informal curriculum for international students as part of their internationalization plan (Sá & Serpa, 2020). Internationalization of Curriculum (IoC) is the ability of universities to work with a variety of backgrounds and prepare students to be global citizens. According to Hammond, Hadjai (2022) IoC represents the incorporation of international, multicultural, and/or global elements in a program of study's learning outcomes, assessment tasks, instructional strategies, and support services.

Abduh and Rosmaladewi (2018), through research developed in Indonesia Higher Education, analyzed among other findings that IoC is important for lecturers and students to be updated on the globe's situation. IoC made it easier for both faculty and students to keep informed with information and technology. On this perspective, De Wit and Leask (2015, p. 11) describe IoC elements that affect its conception.

The local context - the social, cultural, political, and economic conditions - provides opportunities and challenges for internationalization of the curriculum. National accreditation requirements for registration in professions often focus on local legislation and policy. Different national and regional contexts provide different options for internationalization of curriculum. The global context is also important. Globalization has contributed to increasing the gap between the rich and the poor of the world, and the exploitation of the "South" by the "North."

Stallivieri and Gonçalves (2015, p.131) affirm that "the greatest evidence of curriculum internationalization becomes the offer of disciplines that not only offer content on intercultural and global issues, but that are taught in foreign languages, enabling even greater interaction of representatives of different cultures, who can, through the same language, establish an effective communication process". The fact is that this process should be for all, but it is not.

Founded on the perspective of De Wit and Leask (2015), it is possible to verify the existence of a global academic imbalance, since not all the university community have the same conditions to participate and to engage with the internationalization process, either for personal, economic, cultural reasons, or for the lack of proficiency in any foreign language.

Faced by this situation, IoC might settle inequalities and contribute to the international academic community, aiming the internationalization for all. All institutional members should be prepared to accompany IoC movements and its implementations, equipping themselves with the basic skills to

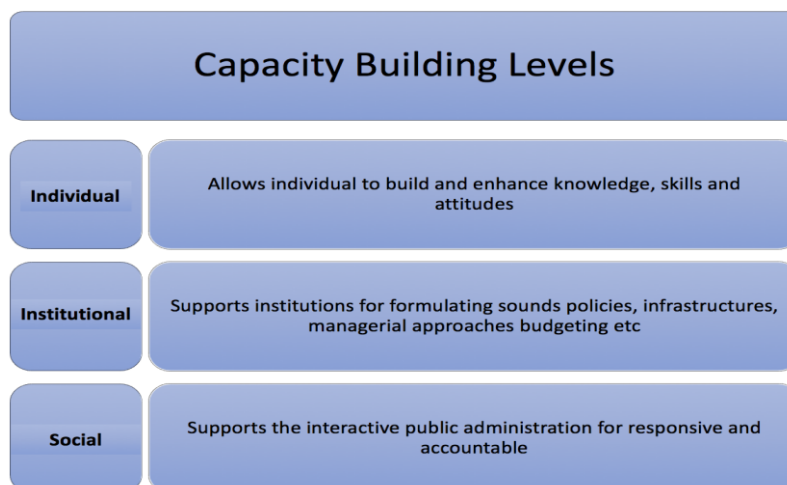
communicate in foreign languages. Empowering the academic community with the appropriate tools to participate in the internationalization process is a key strategy for the success of the institution. This topic will be discussed in the sequence.

### CAPACITY BUILDING PROGRAMS

The ICT revolution has opened many ways of providing education, especially distance model. However, a range of factors, including employers' poor qualification, insufficient infrastructure, lack of training for faculty and staff members, organizational behavior, and a more theoretical curriculum, can hinder it from successfully launching and processing internationalization (Sultana, 2016).

Capacity building is a process of learning to improve the knowledge and competencies held by individuals, groups, organizations, and systems to increase skill sets so they can protect themselves and the profession in the face of ongoing change (Sukrisno, Muharlisiani & Chamidah, 2018). On this perspective, the United Nations Development Program (UNPD, 2022) highlights the levels of capacity building, as presented on Figure 2.

Figure 2 - Capacity Building levels.



Source: UNDP (2022).

Considering the institutional level, faculty members should be the key elements. According to Mam, Kovin and Sinthunawa (2017) the term "capacity of faculty members" refers to their academic qualification, which also includes the upgrading of their knowledge and skills necessary for them to carry out their responsibilities in research and teaching. Foreign language domain is on top of the list.

Faculty members are the most powerful element in classrooms with their students (Slevin, 2001) and HEIs should focus on the capacitation of this key professional to promote internationalization and the institutional growth, principally considering any situation that requires their expertise to improve research and educational abilities. In addition to mastering their technical skills and mastering the

knowledge of their area of expertise, faculty members need to develop intercultural and international skills to be able to engage in new models of internationalization, especially related to the Virtual Internationalization process, being able to join, for example, in a Collaborative Online International Learning (COIL) program.

## COLLABORATIVE ONLINE INTERNATIONAL LEARNING PROGRAMS

The advance of technology represents a benefit to HEIs faced with the pandemic situation caused by Covid-19. Universities were focused on massive open online courses (MOOC), which are "a revolutionary new model for higher education teaching and learning"(De Wit, 2013, n.p.). According to the author, in contrast to MOOCs, which use contemporary technology for a traditional type of delivery on a worldwide scale, there is also the Collaborative Online International Learning (COIL).

The term COIL refers to an approach that aims to provide possibilities of virtual collaboration between HEIs. Because of its potential to foster internationalization even in face of financial limitations, it will be considered here as an alternative for academic mobility and international collaboration (Junior & Finardi, 2018). By immediately establishing connections to one another without facing the expense and risk of travel, COIL can occasionally act as a bridge to allay those anxieties. International program offices and Senior International Officers (SIOs) that are still devoted to study abroad and student mobility but are looking for ways to promote it in the gloomy present are now more likely to use the COIL model (Rubin, 2017).

COIL was developed in 2004 by Jon Rubin, founding director of SUNY – COIL Center. SUNY is a support center created by State University of New York that aims to develop international partnerships of online knowledge with other institutions around the world (Canto, Dergint, Stankowits & Mendes, 2020). According to SUNY (2022), COIL is a method that unites both educators and students from many cultural backgrounds to learn, discuss, and collaborate in the course. All students can enjoy a substantial intercultural learning experience as part of their course of study when COIL is integrated into the classroom.

To facilitate Virtual Exchanges, COIL connects two or more classes with comparable course content which have been in different countries. Once connected, the faculty at the partner universities construct the course materials so that the two distinct student populations can communicate and collaborate (O'Dowd, 2018). Rubin (2017, p. 33) underscores some characteristics about COIL.

Through these efforts and those of others, COIL has become a truly networked model of higher education. It cannot exist on a single campus but requires integration and dialogue between institutions in different countries with varied educational mandates and structures, different academic calendars, and teaching styles, and which reside in a wide range of time zones. While many large universities collaborate internationally on research, very few have significant experience with intensive collaborative networking in pedagogy.

Therefore, COIL uses technology to create an international teaching and learning environment that is more participatory and collaborative (De Wit, 2013). In the meantime, a slower burning addition to international teaching and learning is already taking place with much less attention – ‘virtual mobility’, as it is called in Europe, or ‘collaborative online international learning’ (COIL), as it is more correctly referred to in the United States (De Wit, 2013). COIL represents a model of virtual exchange and loC without the necessity of territorial displacement and is also aligned to IaH.

Either using VE or COIL programs, what became evident is the need for HEIs to develop internationalization plans and actions that meet the demands brought by the new global scenarios. HEIs need to be attentive and act promptly to respond to society's needs, that is, do not interrupt the institutional internationalization process or stagnate the development of linguistic and intercultural competences of the academic community. The most effective way found during the pandemic was the strengthening of internationalization through information and communication technologies and the offer of virtual courses and virtual exchange programs.

To better understand this situation, a case study will be analyzed, pointing paths, and offering creative solutions to other HEIs that are in the process of internationalizing their structures and programs.

## METHODOLOGY

This section presents the methodology used to develop this research. The objective is descriptive, which represents the description of characteristics of a phenomenon or population or, still, make possible the relationship between some variables (SILVA; MENEZES, 2005). In this investigation, the Institutional Center for Languages and Translation (NILT) courses were described and analyzed considering the UFSC virtual internationalization process.

As a research strategy, it is a case study developed at UFSC, focused on NILT, where it offers courses for all academic community promoting institutional internationalization. A case study describes the condition of the context in which a specific investigation occurred (Gil, 2002). Yin (2001) considers case study as an examination of current events, but when one is unable to influence important behavior.

It figures as qualitative study that is interpretative by nature, meaning that the researchers interpret what they see, hear, or understand considering their backgrounds, experiences, circumstances, and prior knowledge (Creswell, 2010). Dates were also analyzed by content analysis, which involves

three steps: previous analysis - specification of field investigated and data organization; analytic description - research deepening based on theoretical framework and hypotheses; and interpretation, involving reflection and empirical content promoting connections among ideas and reality (Triviños, 1987). Thus, the information about NILT courses were analyzed and discussed according to the theoretical framework.

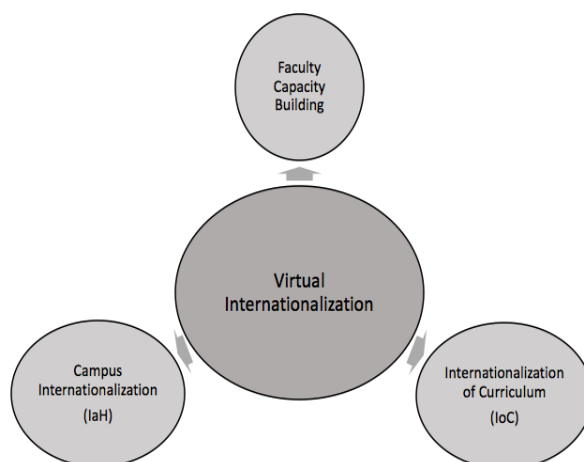
As data collection techniques, bibliographic and documental research were applied as follow: for bibliographic research the keywords "Internationalization of Higher Education Institutions", "Virtual Internationalization", "Digital Information and Communication Technologies", "Collaborative Online International Learning" and "Faculty Capacity Building" were defined using Google Scholar's search platform, composing the theoretical framework; for documental research NILT course catalog, available at SINTER's website (UFSC, 2022b), was used and compounded the investigated data. The data collection period occurred in August 2022.

## RESULTS AND DISCUSSION

This investigation took place at Federal University of Santa Catarina (UFSC), a HEI located in the south of Brazil, accredited by the Ministry of Education (MEC) in accordance with Federal Law n. 3.849/60 (Brazil, 1960). This University has in the administrative structure an internationalization department called Office of International Relations (SINTER). SINTER has as its main goal assisting the University on academic, administrative and (when necessary) financial matters, in the development of activities involving international organizations (UFSC, 2022a).

SINTER has developed and supported several Virtual Internationalization initiatives to address the need for international student mobility at UFSC and partner universities. Three key elements that represent UFSC VI foundation can be summarized by Figure 3.

Figure 3 - UFSC Virtual Internationalization foundation elements.



Source: Elaborated by the authors.

## VIRTUAL ACADEMIC MOBILITY – ONLINE EXTENSION COURSES

The Virtual Academic Mobility – Online Extension Courses are one of the actions that impacted the community and reinforced the institution's social commitment. They are taught in many different foreign languages by professors from various UFSC academic departments and have an interdisciplinary focus as a result. This program seeks to give UFSC students, as well as the international communities, the chance to interact with people from other cultures and take classes in a foreign language in an intercultural setting, as can be seen in Table 3 (SINTER, 2022).

**Table 3** - Virtual Academic Mobility – Online Extension Courses.

Course name	Objectives	Class Hours
<b>Brazilian Sign Language Course: Learn the Basics</b>	This course introduces the basics of Brazilian Sign Language (Libras) and information about the Deaf Community.	30 hours
<b>Découvrir le Patrimoine Archéologique du Sud du Brésil: Santa Catarina</b>	In this virtual extension course, the Museum of Archeology and Ethnology of the Universidade Federal de Santa Catarina invites you to discover the archaeological heritage of southern Brazil.	30 hours
<b>Desafíos de aprender en un Mundo Digital</b>	Este curso virtual de extensión tiene como objetivo reflexionar sobre cómo la transformación digital en la sociedad afecta e influye en las diferentes formas de aprendizaje, dentro y fuera de la escuela, en los procesos de aprendizaje formales y no formales, impregnando tanto el colectivo como las individualidades.	30 hours
<b>Digital Possibilities in Restorative Dentistry</b>	through video classes and complementary materials in English, the course will present concepts and digital tools to allow the diagnosis, planning and manufacturing in restorative dental treatment. The asynchronous access to the course will be through the UFSC Moodle platform, therefore allowing the students to have their own study routine.	30 hours
<b>Digital Transformation in Education: Approaching Immigrant Teachers and Native Digital Students</b>	The course aims to present and discuss how the digital transformation has become a strong influence on education.	40 hours
<b>Diritti Umani e Obiettivi per lo Sviluppo Sostenibile</b>	Questo corso ha come obiettivo presentare le questioni elementari riguardo ai diritti umani e, da questo punto di partenza, discutere i 17 obiettivi per lo sviluppo sostenibile dell'Agenda 2030, in modo a diffondere ai partecipanti la coscienza dell'inscindibilità fra azione e riflessione nello studio della tematica.	30 hours
<b>Industry 4.0: Technology Revolution</b>	In this course, you will be able to answer the following questions: How did Industry 4.0 emerge? What are the challenges and opportunities? What do the following concepts mean: Big Data, Autonomous Robots, Virtual Prototypes, Systems Integration, Internet of Things, Additive Manufacturing and Augmented Reality?	30 hours
<b>Português como Língua Adicional</b>	O curso trabalhará com tópicos gerais de fonética, léxico e morfossintaxe relevantes para a comunicação na variante brasileira, além de aspectos da cultura brasileira em nível básico (A1), sendo dividido da seguinte forma: Comunicação, Gramática, Léxico, Cultura.	30 hours
<b>Tendencias de la Transformación Digital en la Educación Superior</b>	En este curso virtual de extensión, partimos del principio de que la educación efectiva implica más que solo automatización tecnológica y una experiencia de aprendizaje digital, sino que requiere transformar la forma en que se enseña y adaptarse a las nuevas necesidades de aprendizaje del estudiante.	30 hours
<b>Writing and Publishing Scientific Papers</b>	This course teaches undergraduate and graduate students to become more effective writers of scientific papers, using practical examples and exercises.	30 hours

Source: UFSC (2022b).

## COURSES THOUGHT IN FOREIGN LANGUAGES

One crucial step in strengthening Federal University of Santa Catarina's comprehensive internationalization is the provision of courses offered in different foreign languages (UFSC). SINTER created the Catalog of Subjects in a Foreign Language of the courses offered in the undergraduate and graduate programs at UFSC. It aims to receive international students from partner institutions, as well as providing UFSC students with the opportunity of cultural interaction with people from different countries and the improvement of their knowledge of a second language.

Three undergraduate courses and thirty-one postgraduate courses were included in the first edition of the Catalog, which was released in the second half of 2018 on the SINTER website. The courses were taught at the Florianópolis campus in 2018 and 2019. Then, there was a second edition, which includes twelve undergraduate courses and sixty graduate courses offered on the Florianópolis and Joinville campuses for the 2020 and 2021 academic years. The classes could be taken in either English or Spanish. Professors at UFSC who want to internationalize their classrooms are offering the courses, and participants can be UFSC students, international mobility students, or anybody else who wants to practice a language and meet individuals from other cultures.

Due to the pandemic, the Foreign Language Course Catalog was reorganized, and a new version was released with updates like the addition of virtual courses, using TICs and aligning strategies to strengthen UFSC Virtual Internationalization.

## CAPACITY BUILDING PROGRAMS

To advance the internationalization process at any HEI, it is imperative to provide the community with necessary skill as stated by UNDP (2022), in the individual, institutional and social level. To make this happen, HEIs must provide support to the faculty and to the staff.

As a sector of SINTER, NILT was created to promote and foster the internationalization process of UFSC through the development of language policies and courses (UFSC, 2022c). NILT's objective is to become a space where internationalization initiatives happen in partnership with international organizations. Thus, NILT offered courses for foreign students and to all community members who are interested in improving language and learning specific international topics. NILT offered courses by a Catalog of Virtual Courses (CVC) for Internationalization that aimed at training the UFSC academic community and the community in general with very specific goals. The CVC offered in 2021 and 2022 are described on Table 4.

**Table 4** - Courses offered in foreign languages and concluded in 2021 and 2022.

Course name	Objectives	Modality and platforms
Paths and perspectives of studying in Italy – reading and understanding of public notices in Italian	Instrument the academic public (undergraduates, postgraduates, technicians, faculty and the community in general) for the understanding of scholarship notices for Italian educational institutions.	Synchronous classes will be taught via Moodle
Certification exams in Spanish: approach	Familiarizing participants with the format of the CELU, DELE, SIELE, LAPLE (DLLE/UFSC) proficiency exams, the types of questions, the skills assessed, the time for completion, the assignment of grades/scores and the conditions of offer and validity of exams.	The course will be completely remote, through the Moodle Groups platform
Aspects of academic writing in Brazilian Portuguese: abstract, review and scientific article	Enabling participants to produce quality academic texts in Brazilian Portuguese, providing them with the formal, linguistic and argumentative elements necessary for the process.	Classes are entirely distance learning, using the Moodle platform to provide content and activities.
DEL F B1 Preparation	Developing language proficiency with a view to enabling UFSC university community to oral and written interaction with their peers from foreign universities, thus promoting the internationalization of the Brazilian university.	Synchronous classes can be taught through Zoom platforms, Google Meet or Big Blue Button, to be chosen by the teacher.
Preparation of motivation letter for academic exchange/mobility	Writing a letter of motivation to apply for academic mobility in a Hispanic country.	The synchronous classes will be held on Wednesdays from 17:00 to 19:00, and the asynchronous activities will be held on Fridays.
Production Written in English – Abstracts	Producing abstracts, identify genre characteristics, compare, and contrast different types of abstracts.	Classes will be in remote format, via the Moodle platform.
Cultural texts in German: a translation practice	Recognition of cultural aspects in German language texts and how the functionalist theory can help in the practice of translating these elements.	Synchronous classes will be taught via Google Meet.
Atelier: Rédiger une lettre de motivation	Introducing intercultural issues involving the elaboration of a motivation letter in French, development of comprehension skills to recognize the structure of application letters for internships, courses, among others, and written production of a motivation letter based on linguistic and specific lexicals that the genre requires in the academic context.	Synchronous classes will be taught via Google Meet.
Italian language proficiency tests	Understanding what these Italian language proficiency tests are for, how they are carried out and assessed, and what skills the candidate must have to choose the most appropriate level for their linguistic knowledge.	Synchronous and asynchronous classes
Aspects of academic writing in Brazilian Portuguese: abstract, review and scientific article	Enabling the participant to produce quality academic texts in Brazilian Portuguese, equipping them with the formal, linguistic, and argumentative elements necessary for the process.	Classes are entirely distance learning, using the Moodle platform to provide content and activities.

Source: UFSC (2022b).

In general, NILT courses focus on the development of specific topics related to the development of communication skills, from certification and proficiency exams (Spanish, Italian, French) to academic writing and research paper's structure or abstract structure.



As can be seen, all courses promoted by NILT involve some of the modalities referenced by the processes and forms of internationalization, with a special focus on education and training in foreign languages considered the most fundamental tool for internationalization.

## COLLABORATIVE ONLINE INTERNATIONAL LEARNING

UFSC has also given COIL projects significant consideration, especially when it comes to involving professors who are eager to submit a proposal. This activity is still in use, has evolved, and has the following form: A professor from university A created an online teaching platform for their classes in collaboration with a professor from international university B. Because of this, there are two universities, two professors, two classes, two languages, at least two cultures, and a course or module that is being co-taught by professors from both universities, with tasks to be developed in the virtual modality in a collaborative, intercultural, bilingual, and interdisciplinary way (SINTER, UFSC, 2022).

According to UFSC, the academic community can gain access to the following as advantages of this practice: global learning integrated into the curriculum and for all; applied learning; building 21st century skills; intercultural awareness and skills development; interdisciplinary application of knowledge; diversity and inclusion; scalable and low-cost internationalization; high-impact practice for teaching and learning (SINTER, UFSC, 2022).

All the activities analyzed in this research took place virtually with the aim of strengthening the proposal that internationalization must be for everyone and must be inclusive. It is noteworthy that there was not only a predominance of the English language, but all the different languages of communication, used in the international cooperation agreements signed by UFSC, were contemplated. It is possible to assure as well that UFSC is highly investing on its internationalization due to the relevant number of virtual initiatives.

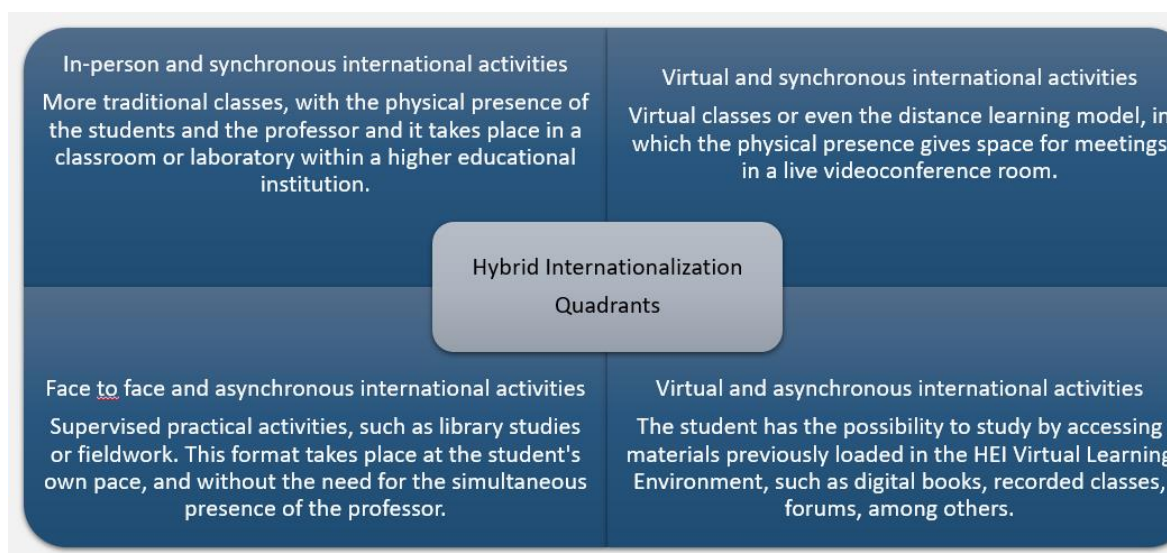
## HYBRID INTERNATIONALIZATION

As a data result it was also possible to verify that the Institution is moving to a new momentum of the internationalization process which is the hybrid model – a new way to interact with partners from all over the world.

Based on the consolidated concept of internationalization of higher education (De Wit et al, 2015), Stallivieri (2022) proposed that Hybrid Internationalization is “the intentional process of integrating an international, intercultural, or global dimension in the objectives, functions and offer of postsecondary education, which takes place both in person and with the support of the digital technologies of information and communication”.

According to the results of this investigation and bearing in mind the end of the pandemic restrictions, it is possible to assure that UFSC will return to its internationalization traditional models but will keep the VI activities, especially considering it is more inclusive and can be for all. This movement will highlight the model proposed by Stallivieri (2022) of Hybrid Internationalization Quadrants that combine face-to-face and remote practices using digital tools and can be synchronous and asynchronous as shown in Figure 4.

Figure 4 - Hybrid Internationalization Quadrants



Source: Stallivieri, 2021 (Adapted from Niskier, 2020).

It is a considerable Institutional effort to keep developing activities to foster and maintain the internationalization process alive, specially helping the academic community in getting better qualification to deal with international issues.

According to UFSC (2022), the past year has confirmed that there is still much to learn about the virtual teaching and learning environment and that it is a place for inclusiveness, interculturality, and development for both those who teach and those who learn. Maybe, Hybrid Internationalization model will be the roadmap to a more Responsible Internationalization.

## FINAL CONSIDERATIONS

The present study sought to investigate the actions taken by a Brazilian higher education institution located in the southern region of Brazil to respond to the impacts of Covid-19. Internationalization actions were identified that started to use ICTs, strengthening the possibilities of face-to-face environments and virtual learning environments. It highlighted a new model of the process: the Hybrid Internationalization.

This movement corroborates the concept of Virtual Internationalization proposed by contemporary authors who are studying the new modalities of internationalization and signal for some contemporary trends, such as hybrid learning environments. The results of the study showed that Virtual Exchange, the teaching of foreign languages and activities such as courses taught in foreign languages and Collaborative Online International Learning (COIL) programs using TICs were highlighted as strong alternatives to avoid the interruption of the institutional internationalization process.

The investigated Institution acted in the direction of the maintenance and expansion of the Campus Internationalization activities, the Internationalization at Home, through the offer of Virtual academic mobility – Online Extension Courses; subjects taught in foreign languages, updating the catalog of opportunities, encouraging professors to offer programs and subjects in their area of knowledge in foreign languages. Likewise, there was an expressive offer of courses promoted by the Language and Translation Center (NILT), to train the academic community, faculty, students, and researchers, in reading and writing, writing abstracts, filling in documents and searching scholarships to study abroad, through the development of language skills and COIL programs to be developed in a near future.

The investigated Institution makes clear its position of investing in the internationalization process both face-to-face and virtual, advancing to the new Hybrid Internationalization model, without neglecting to meet the new demands imposed by the current global scenario. Even if not all initiatives have been strengthened, the Institution is preparing to fulfill its mission and internationalization goals established and disclosed in official documents such as the institutional internationalization plan, dedicating itself to offering internationalization for all.

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