

Internationalization at Home and Virtual: A Sustainable Model for Brazilian Higher Education

Journal of Studies in International Education
2022, Vol. 26(2) 222–239

© 2022 European Association for
International Education
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/10283153221076898
journals.sagepub.com/home/jsi



Vanessa Gabrielle Woicolesco¹ ,
Carla Camargo Cassol-Silva¹
and Marilia Morosini¹

Abstract

The objective of this article is to analyze the strategies adopted by Brazilian universities for the continuity of higher education internationalization actions during the pandemic of COVID-19. Taking as a guide the stages of development of the internationalization of higher education proposed by Brandenburg; de Wit; Jones; Leask & Drobner (2020), a new stage of development is proposed: the virtualization. The research results suggest that it will continue after the pandemic. In an empirical qualitative study, conducted with six Brazilian Higher Education Institutions well evaluated by the Times Higher Education 2020 ranking, it was identified that the Internationalization actions developed to contribute to a new sustainable model of internationalization in the country, based on virtualization of Internationalization at Home, and that meets the main objective of the internationalization of higher education: to provide opportunities for all students to develop international perspectives and intercultural competencies during their formative journey.

Keywords

internationalization of higher education, internationalization at home, virtualization of internationalization, COVID-19, Brazil

¹Pontifical Catholic University of Rio Grande do Sul (Pontifícia Universidade Católica do Rio Grande do Sul), Rio Grande do Sul, Brazil

Corresponding Author:

Vanessa Gabrielle Woicolesco, Pontifical Catholic University of Rio Grande do Sul (Pontifícia Universidade Católica do Rio Grande do Sul), Av. Ipiranga, 6681 Partenon, Porto Alegre, Rio Grande do Sul 90619-900, Brazil.

Email: vanessa.woicolesco@edu.pucrs.br

Introduction

The dynamics of a globalized society produce reflections in the local from the international context and cause changes throughout society. In Higher Education, these changes reflect the paradigms of international education, internationalization, international cooperation and globalization, among others (Morosini, 2011; Knight, 2020). Inherent to the development of Higher Education, Internationalization has occupied research agendas and institutional policies all over the world (Knight, 2020).

In Brazil, the internationalization of Higher Education is limited and predominantly depends on public funding. This is because the beginning of the internationalization process of Brazilian Higher Education Institutions (HEIs) was "induced, with a strong state presence, and was historically subordinated to the developmental priorities and interests of the Federal Government" (Knobel; Lima; Leal & Prolo, 2020, p. 674). These limits are results of a process in which the internationalization of Higher Education in the country is still mainly linked to research groups and graduate programs and there is little incidence of Internationalization at Home (IaH) in university policies and practices (Neves & Barbosa, 2020).

In 2020, the COVID-19 pandemic caused a humanitarian crisis, and the new coronavirus crossed borders rapidly. To try to mitigate the effects of the spread of the virus, around the world governments decreed the temporary closure of educational facilities. This interruption of school flows affected 84.3% of the total number of students worldwide, enrolled at various educational levels (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020). The closure of HEIs in Latin America and the Caribbean (LAC) has reached 23.4 million students and 1.4 million faculty members, which represents more than 98% of these two publics (IESALC, 2020).

Regarding the internationalization of higher education, the first impacts were for academic mobility. According to an analysis by IESALC (2020), in the short term, the most significant impacts were related to the need to return students to their origins and the management of this process, and in the medium and long term, with the financial crisis imposed by the pandemic and the potential impoverishment of families, the decrease in public resources for funding this training, the opportunities for traditional academic mobility will be diminished (IESALC, 2020). Thus, the reduction of academic mobility opportunities has provided HEIs with the opportunity to design and implement internationalization strategies that contribute to achieving the development of intercultural and international learning for higher education students without the need for physical displacement (Toro, 2020).

This article aims to analyze the internationalization strategies adopted by Brazilian universities during the COVID-19 pandemic. To this end, an empirical qualitative research was conducted, based on the experience of six Brazilian universities evaluated among the best in the country in The Times Higher Education (THE) and participants of the current Brazilian program to encourage the Internationalization of Higher Education in the country, the CAPES PrInt Program.

The study is built in three sections, besides an introduction and final considerations. The first section presents the development of the internationalization process of Higher Education in Brazil based on the stages proposed by Brandenburg, de Wit, Jones, Leask and Drobner (2020). The stages proposed by Brandenburg et al. (2020) present the process of development of the Internationalization of Higher Education, and for this reason, it was chosen as the theoretical reference of this study. Next, the methodological aspects are presented. The third part presents and discusses the results of this research. Next, the methodological aspects are presented. The third part presents and discusses the results of this research.

Development of Internationalization in Higher Education in Brazil

In the context of the internationalization of higher education, contemporary approaches are focused on conceptualizing it as a process of integrating the international, intercultural or global dimension in Higher Education. The concept of the Internationalization of Higher Education has been redefined over time to respond to the emerging challenges of society and HEIs. For De Wit et al. (2015, p. 29), Internationalization is "the intentional process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education to improve the quality of education and research for all students and staff and to make a meaningful contribution to society. It is a process that occurs from relationships with countries in all regions of the globe so that cultures and differences are valued, local communities are reached, contributing to the achievement of global citizenship and sustainable development (Morosini, 2017).

This perspective is complemented by other authors, who highlight the internationalization of higher education as: an element that contributes to improving the quality of university functions, prepares students for living in a globalized intercultural world and allows institutions and their academic productions to have international visibility and reach (Leask, 2009; Beelen & Jones, 2015; Brandendurg & Laeber, 2015; de Wit, Hunter, Howard & Egron-Polak, 2015; Morosini, 2017; Altbach & Hazelkorn, 2018). Recent research has highlighted that internationalization needs to be aligned across institutional policies and practices, not just with an emphasis on teaching and research, as strategic to reaching out to local communities and society (Gácel-Ávila, 2012; Brandendurg & Laeber, 2015; Hudzik, 2015; Brandenburg et al., 2020).

The landscape of higher education internationalization before the COVID-19 pandemic can be synthesized when we use Brandenburg et al. (2020) typology. It is a perspective of authors coming from a reality in which internationalization occupies an important space not only in the search for quality education but also as an economic factor for the development of the nation. In terms of Brazil, when we analyze the stages of development proposed by these authors, many similarities can be identified, and practically all the stages pointed out by the authors are present. However, the process of internationalization of higher education in the country is more recent, of lower incidence and does not cover all HEIs. In the Brazilian reality, we identified

that the five phases coexist simultaneously, with differences between spaces, times and stages of development, as we will present below.

Development 1: from individual activities to systematic institutionalized comprehensive internationalization (Brandenburg et al., 2020). For the authors, one of the first stages of internationalization is marked by individual academic activities of students and researchers in HEIs, without representing, in this way, a commitment from the institutions. In Brazil, internationalization, until the first decade of this century, is also marked by movements of teachers and students abroad in an individualized way.

This characteristic can be identified at the end of the 19th century when some HEIs in the country recorded the presence of foreign professors. Later, in the 1930s, this internationalization movement intensified with the creation of strategies to attract faculty from Portugal and France. However, it was in the 1970s that the first National Post Graduation Development Plans were created for the training of Brazilian professors in Northern institutions, mainly in the United Kingdom (UK) and the United States (USA). In this phase, internationalization is focused on the research function.

With globalization, internationalization also extends to the teaching function and becomes an institutional action. Internationalization becomes a criterion of excellence and evaluation in the distribution of state funding, such as scholarships for doctorates abroad, sandwich doctorates, technical visits, research productivity scholarships, foreign researchers in the country, among others. It is important to highlight that the regulation of higher education in Brazil is the responsibility of the federal government and, consequently, internationalization in the pre-pandemic period had a strong dependence on state policies. This is a changing scenario in the pandemic context, in which HEIs needed to develop quick and institutional responses to face the consequences of the pandemic.

The most recent internationalization programs fostered by the Brazilian federal government are the Science without Borders Program (CsF) (2011–2017), Languages without Borders (IsF) (2012, current as Andifes IsF Network), and the Institutional Internationalization Program of the Coordination for the Improvement of Higher Level Personnel (CAPES Print) (2018–2022). The development of these programs points to a movement from people-based internationalization to institution-based internationalization, aiming to expand opportunities for international and intercultural experiences for a larger number of beneficiaries, and follows contemporary global trends (Knobel et al., 2020).

The current internationalization program funded by the Brazilian government entitled CAPES PrInt Program (2018) seeks to shift the individual perspective of internationalization to the broader, institutional perspective of the Brazilian universities selected for the program, whose requirement is the existence of an institutional internationalization plan. The program grants autonomy to universities to manage the internationalization process in the institution, summarized in funding for scholarships abroad, such as sandwich doctorate, senior visitor, training in short courses or summer/winter schools, post-doctorate and work mission.

This stage of development of internationalization in the country is accompanied by the creation of internationalized HEIs, different from the predominant models, since the beginning of Brazilian higher education. As an example, we cite the creation in 2010 of the Federal University of Latin American Integration (UNILA), focused on the training of human resources and regional integration with other Latin American and Caribbean countries, and the University of International Integration of Afro-Brazilian Lusophony (UNILAB), focused on the training of human resources and regional integration with other member countries of the Community of Portuguese Language Countries (CPLP), especially the African ones.

Development 2: from individual "nice-to-have" mobility experience to educating global citizens (Brandenburg et al., 2020). In this phase, the authors point to a redirection of the focus of internationalization, which bets on the formation of global citizenship as a strategy. This stage can also be identified in Brazil, but there are differences regarding the direction of the flow of internationalization, in which the global north has been more encouraged, and the intensity. In the country, as in the world, mobility was characterized as a plus in the career of students coming from medium-high and high economic strata. However, in Brazil, the mobility rate is not high, representing only 1.2% of the total number of higher education students participating in academic mobility worldwide. International students seeking Brazil for academic mobility represent only 0.4% of the total number of academic mobility students in the world (UNESCO, 2021). Such data identifies that this one-to-one internationalization strategy still has limited potential to expand international and intercultural learning opportunities for the academic community.

In parallel to the individual "nice-to-have" mobility experience, the motivations (rationales) for the internationalization of Global Citizenship Education (GCED) have been growing in Brazil. This concept is inserted in the context of a larger proposal, led by the UN, of sustainable development for the world, summarized in the Sustainable Development Goals (SDGs). As of 2015, with the Incheon Declaration and the E2030 Agenda, the GCED strengthens its presence in educational discussions, highlighting 4 main axes: the holistic and integrated perspective of the various educational levels; critical thinking; preservation of universal values; and dialogue between different actors, which characterizes an inclusive, equitable, and lifelong education (SDG4). The conception and degree of the proposed GCED are influenced by the international body that most affects the different territories. In the reality presented by Brandenburg et al. (2020), the influence of the international bodies comes from UNESCO and the Organization for Economic Cooperation and Development (OECD). In Latin America and the Caribbean (LAC) and, in this case, in Brazil, the IESALC has great influence.

Development 3: the convergence of the concepts of Internationalization at Home (IaH) and Internationalization of the Curriculum (IoC) (Brandenburg et al., 2020). In this stage HEIs seek to promote internationalization in the course of the student learning process, this being the main focus of policies, programs and actions. The most present trends in this stage are Internationalization at Home (IaH) and

Internationalization of the Curriculum (IoC). The perspective of an international and intercultural education for all students is one of the assumptions for global citizenship. For Cassol-Silva (2019), the IoC as an alternative that reaches all students and enables interaction with people from distinct cultures, promotes active engagement in learning, and contributes to equitable and quality higher education.

The promotion of global learning experiences on the university campus itself integrates the dimensions of teaching, research, and extension with the social responsibility of HEIs. In the Brazilian context, one of the challenges for the implementation of both IaH and IoC is the "lack of investments by HEIs in the training of those involved in the educational process and the institutionalization of the culture of internationalization as a focal point for the qualification of institutions" (Marcelino & Lauxen, 2018, p. 04).

The incorporation of Digital Information and Communication Technologies (DICT) represent one of the alternatives to favor IaH and IoC in the Brazilian context. This process of incorporating DICT in international education is called the virtualization of internationalization (Bruhn, 2017) or distance internationalization (Mittelmeier et al., 2021). For Bruhn (2017) Virtual internationalization occurs when ICTDs are incorporated into the international, intercultural or global dimensions of the functions and purposes of higher education. Mittelmeier et al. (2021) argue that distance internationalization means conducting education activities across the geographic boundaries of institutions, students, faculty, and staff that are mediated by technology, thus extending the benefits of internationalization to a wider public.

The pandemic of COVID-19 opened many paths for the development of technology-mediated internationalization strategies, which expanded the scope, access, and allowed for the continuity of international partnerships and internationalization actions. As a result of this new model of internationalization, virtual exchanges

has great potential to foster a range of 21st century employability skills, including media and digital literacy, communication skills, global awareness, empathy, critical and analytical thinking, foreign language skills, and intercultural competencies, and can also be used to complement and enhance universities' physical exchange programs (O'Dowd & Beaven, 2019, p. 15).

The virtualization of internationalization has the potential to strengthen IaH, promote the development of international and intercultural competencies in the domestic HEI environment for all students, shifting the emphasis from elite internationalization to a more inclusive model (Leask & Green, 2020). In this same understanding, the incorporation of ICTs in internationalization does not diminish the importance of academic mobility for learning global citizenship, but rather expands the repertoire of institutional and academic strategies that allow both the growth of partnerships for international exchanges, and involves new actors in this process.

The incorporation of technologies in internationalization actions may represent an opportunity to expand the international and intercultural experience, from IaH.

For Bruhn (2017), with the expansion of the offer of virtual and/or distance internationalization actions, it will be important to further investigate how this new modality impacts the internationalization processes of higher education.

In the context of LAC, the incorporation of virtual processes based on cooperation networks in the internationalization of higher education is contemplated in the Action Plan of the Regional Conference on Higher Education (CRES) (2018). In this document, it was established that spaces for face-to-face and virtual academic mobility should be prioritized, starting with the design of intergovernmental policies and programs to expand intercultural learning opportunities for all teachers, students, and administrative staff (IESALC, 2018).

Development 4: from living on myths to fact-based accountability or: from input to output, outcome and impact (Brandenburg et al. 2020). The belief that internationalization is a goal in itself and boils down to one or more experiences abroad loses strength at this stage, in which "Instead of being satisfied with achieving quotas, internationalization is now increasingly concerned with what happens with those exposed to its activities and how it influences the institutions and individuals" (Brandenburg et al., 2020, p. 17). At this stage, the authors note that there has been a change in the scope of research on internationalization, and it is more relevant to evaluate the impacts than just the metrics of results.

In the Brazilian context, from 2010 a process of expansion in the production of knowledge about internationalization in the country can be identified. However, unlike the global north, in which productions about the daily life of internationalization are the predominant ones, in Brazil, a large part of the productions focuses on the concept, its epistemological perspectives and influences of international organizations (Morosini & Dalla Corte, 2018). Some institutions and associations, such as the Brazilian Association of International Education (FAUBAI), and specific research groups that seek the understanding of models and practices of internationalization management and evaluation.

Currently, although the internationalization process of Brazilian HEIs is under construction, it is possible to identify initiatives for the construction of internationalization indicators. The objective is to evaluate precisely the actions, programs and policies developed and their impact on society, contributing with transparency and allowing the local and international communities to know these results. One of these initiatives is the "Internationalization Indicators" project, developed by FAUBAI; research recently published on the subject (Morosini, Fernandes, Leite, Franco, Cunha, & Isaia, 2016; de Souza, 2017); and the elaboration and implementation of institutional Internationalization Plans and, driven by the Capes PrInt Program.

Instead of being content with reaching goals, internationalization is now increasingly concerned with what happens to those exposed to its activities and how this influences institutions and individuals. This is a relevant trend: first, because it clarifies that we need to analyze to what extent the concept of impact already exists in the HEI; second, for the awareness of the social engagement component in the impacts of internationalization. Thus, the constant articulation between management and evaluation of

the internationalization process are crucial factors to ensure the sustainability of actions, strategies, and investments in the long term.

Development 5: from Anglo-Western and European-centered internationalization to a truly global approach and regional self-confidence (Brandenburg et al., 2020). This stage is identified in Brazil, although the influence of the global North predominates. This assertion is explained by the fact that in Brazil the influence of Anglo-Western and European-centered internationalization has always been very strong. This is a result not only of the colonization process by Portugal but also of the fact that higher education in the country is centralized in the federal government and practically all internationalization policies foster interaction with the global north. This focus hindered the search for internationalization for regional integration, in the specific case of LAC countries, whose main challenge is still the search for integration between Spanish and Portuguese-speaking countries.

But internationalization is movement, and we identified a similarity of the development of internationalization in Brazil with the fifth phase proposed by Brandenburg et al. (2020) when the authors point out the movement towards a self-confidence regionalization. This perspective is guided in the region by IESALC, which through its regional conferences has sought to discuss a higher education perspective for the region, based on the E2030 Agenda. CRES (2018) ratified higher education as a social public good, a human and universal right, and a duty of the States, following the agreements already established in previous regional and world conferences.

Based on these assumptions, a CRES 2018 action plan for the period 2018-2028 was elaborated, and a specific axis of internationalization is included (IESALC, 2018). Highlights in this framework are the incorporation of a comprehensive conception of internationalization in the policies and National Education Plans; the need for financing national and institutional internationalization programs; the requirement for qualified operational structures dedicated to the management of the internationalization process in HEIs; the duty of States to review national legal regulations to promote the recognition of degrees, strengthening the Regional Agreement on Recognition of Studies, Degrees and Diplomas of Higher Education in UNESCO's LAC; actions to consolidate the Latin American and Caribbean Area of Higher Education (ENLACES); strengthening South-South cooperation among HEIs; consolidating existing institutional networks and fostering the creation of others; establishing mechanisms to ensure international visibility for regional higher education systems (IESALC, 2018).

Also concerning the CRES Action Plan 2018-2028, internationalization programs that privilege knowledge about one's region, its history, culture, and languages, from an intercultural perspective, should be boosted. The incorporation of international and intercultural dimensions in teacher training is also encouraged, as well as in the curricula of undergraduate and graduate courses in general (IESALC, 2018).

The binding commitment between higher education and society is part of the identity of Latin American and Caribbean HEIs. Inserted in an emerging context, these institutions face tensions and challenges typical of developing countries, but they preserve in their DNA the missions of teaching, research, and extension as an inseparable tripod, in which internationalization is also called upon to propose solutions that respond to the demands of local, regional, and global society.

With part of the higher education agenda and can be considered an emerging and developing stage, Internationalization of Higher Education for Society (IHES) "explicitly aims to benefit the wider community, at home or abroad, through international or intercultural education, research, service and engagement" (Brandenburg, de Wit, Jones & Leask, 2019) and represents an opportunity for internationalization to occupy a leading role in achieving the SDGs and major social problems (Brandenburg et al., 2020). The concept defined by these authors presents a new paradigm of higher education internationalization, in which universities' engagement with society is driven through internationalization.

Method

The approach used in this article presents the results of qualitative research that allows for the understanding of social phenomena in all their dimensions (Sampieri; Collado & Lucio, 2013), which makes it suitable for the central purpose of this research, which is to analyze the strategies adopted for the continuity of the internationalization processes of higher education in Brazil during the COVID-19 pandemic, based on the experiences of Brazilian HEIs that were well evaluated by the Times Higher Education (THE) 2021.

To construct the research data, a semi-structured questionnaire was applied using the Microsoft Forms platform, with the Brazilian HEIs ranked among the top ten in THE 2021. Six HEIs returned the survey. The invitation to participate in the survey was sent by e-mail to the person appointed by the HEI to manage the internationalization process. The data obtained from the survey comprised the following axes: identification of the HEI; institutional policy and internationalization actions carried out during the COVID-19 pandemic in the year 2020. This last axis includes online events, academic mobility, Collaborative Online International Learning - COIL¹, double degree courses, international learning experiences, other internationalization actions and evaluation of internationalization actions.

Regarding the internationalization actions promoted by the Brazilian HEIs participating in the research during 2020, we sought to know if online academic events were promoted, such as webinars, lives, congresses, workshops or other events of an online academic nature with the participation of international professors and/or researchers. If the answer was affirmative, the HEIs were asked to indicate which countries were represented in the events held.

In relation to academic mobility, it was important for the present study to investigate whether the HEI developed virtual academic mobility actions both out and in. In

the case of mobility out, the number of participating students and destination countries was requested. In the case of mobility in, we requested data regarding the participation of international students: number of students and countries of origin. Still, on this topic, the HEIs were asked about their participation in cooperation programs for virtual academic mobility. The COIL actions and the realization of courses with double degrees were part of the questionnaire. These questions sought to understand whether the HEI promoted these actions, and the countries of the international partners involved. Other international learning experiences not covered in the topics above were also relevant. In addition, the evaluation process of the HEI's internationalization actions and policies were also contemplated by the instrument for the construction of the research data.

The construction of the survey data was carried out between December 09, 2020 and January 18, 2021. To identify the contributions of each participating HEI in this study, the following codes were used HEI A, HEI B, HEI C, HEI D, HEI E and HEI F. Each code represents one of the HEIs participating in the research, and the code was assigned according to the HEI classification in THE 2021.

Evidence of a new Stage in the Development of Internationalization in Higher Education: the Virtualization of IaH as a Sustainable Model for the Post-Pandemic Context

Research results. The proposal of a sixth stage for the typology of the development of internationalization of higher education (Brandenburg et al., 2020) is marked in this analysis by international cooperation actions and programs based on the use of DICT developed by six Brazilian HEIs well evaluated in THE 2020 during the COVID-19 pandemic. The use of DICT in university functions was the link found to maintain the development of the institutional mission of the HEIs. In the realm of Internationalization, with the closing of borders by national states as an initiative to mitigate the spread of the SARS-CoV-2 virus, international students had to make a difficult choice: return to their home countries and abandon academic mobility or bear the emotional and financial costs of complying with social isolation abroad. In the pandemic context, the continued provision of international education was made possible with the mediation of technologies. Several strategies were used, such as webinars, scientific congresses, COIL projects, virtual mobility, short courses and/or double degrees, among others.

To present some evidence that the virtualization of IaH may constitute a new stage of development of the internationalization of higher education, the internationalization strategies adopted by Brazilian HEIs during the year 2020 are presented. Among the HEIs that make up the sample of this study, most institutions answered that in the pandemic period webinars, lives, congresses, workshops or other types of events of online academic nature were held with the participation of international professors and/or researchers, with the exception of HEI C. The countries that were most represented in

these events were the United States, Canada, Portugal, Germany, France, United Kingdom, Spain, Sweden, Italy, Israel, China, Japan, Australia, South Africa, Mozambique, India, Mexico, Argentina, Chile, Ecuador, Colombia and Uruguay.

In this same pandemic period, some HEIs also managed to perform virtual academic mobilities, as is the case of HEIs B, HEI C, HEI D, HEI E and HEI F. At HEI B, the actions were implemented as of the second academic semester of 2020, mainly with institutions from Canada and the United States. HEI C has integrated two specific programs, UHK e-learning (Czech Republic) and a reciprocal program for physical therapy students with the Universidad del Valle (Colombia). In this HEI, virtual mobilities were developed with HEIs from the Czech Republic and promoted the participation of 43 undergraduate students and 16 graduate students. HEI E has integrated the Virtual Mobility Space in Higher Education (eMOVIES), linked to the Inter-American Organization for Higher Education (IOHE), and the Americarum Mobilitas Program, of the Organization of Catholic Universities of Latin America and the Caribbean (ODUCAL).

With these partnerships, HEI E was the institution that registered the highest number of international students in virtual academic mobility, having promoted the participation of 106 students in this modality, with HEIs from Argentina, Chile, Colombia, Mexico, and received students from Argentina, Chile, Colombia, Ecuador, Mexico, Peru, and the United Kingdom. At HEI F, a virtual mobility pilot program is being developed, and the institution is also currently participating in network programs to offer mobility, such as the Pilot Program of Virtual Mobility for undergraduate students of the Association of the Montevideo Group of Universities (AUGM), Consortium of Virtual Mobility eMobi@Dg2, and the Virtual Mobility Program of the Brazilian Association of State and Municipal University Rectors. This HEI also established a partnership with the digital platform COUSERA, offering 8 thousand vacancies in online courses from several renowned universities in the world. The institution registered a total of 32,524 enrollments and 72,390 lessons developed.

COIL projects were carried out in the year 2020 by HEI E and HEI F. Other internationalization virtualization actions were also registered by the HEIs participating in this research. In HEI F, Teletandem was carried out, an action that promotes the collaborative learning of a foreign language with the support of ICTs, through practice with an international partner. The HEI C, as a complementary internationalization action, also established a partnership with the Coursera platform and made available 3200 free licenses and with certification on that online platform for students, technical-administrative staff, and teachers to take online courses. This university also carried out "a series of communication actions to promote, teach, raise awareness and disseminate university internationalization" (answer HEI C). At HEI D, the actions that promote international experiences to students are not centralized in a specific sector for managing the internationalization process, so it was not possible to specify the actions and partner countries.

The evaluation that the representatives of the sectors responsible for the management of the internationalization process in the HEIs participating in this study make of the Internationalization actions developed in 2020 was also object of the data collection instrument. For all HEIs, mobility was the internationalization action most impacted in both the national and global scenarios. Some HEIs (HEI A, HEI B, HEI C and HEI D) pointed out that the effects of the COVID-19 pandemic on academic mobility were negative, and that the consequences affected students, teachers, researchers, and technical-administrative staff. On the other hand, some institutions recognized the pandemic situation as an impulse to adapt virtual internationalization activities, and among the positive impacts are the formalization of new cooperation agreements or protocols of intention (HEI D), and the broadening of horizons of intercultural and international education for students who did not have access to face-to-face mobility opportunities abroad (HEI C, HEI E and HEI F).

Research analysis. The inclusion of a virtual dimension in internationalization actions gained momentum during the COVID-19 pandemic around the world when borders were closed and people were unable to move across land or air borders. An analysis by IESALC (2020) points out that the main impacts for higher education students in the region with the closure of HEIs were the uncertainties and consequent delays in the degree completion process, the continued financial burden of tuition and other fees, and the low employment prospects for new graduates due to the impact on the global economy of the crisis caused by the COVID-19 pandemic.

Within Brazilian Higher Education, the impacts of the fiscal austerity policies that were in place in the pre-pandemic period posed a challenge to the different institutions that make up the Brazilian higher education system (public institutions maintained by federal, state or municipal governments, private non-profit and for-profit institutions) (Woicolesco; Morosini & Marcelino, 2021). This system is composed of 2,608 (two thousand six hundred and eight), being the public network composed of 302 HEIs (11.6%) and the private network composed of 2,306 HEIs (88.4%) (Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira [INEP], 2020).

A survey by the Regional Center for Studies for the Development of the Information Society, acting under the auspices of UNESCO (Regional Center for Studies for the Development of the Information Society, 2020) revealed that in Brazil, three out of four Brazilians access the Internet, the most used tool for this access being smartphones (99%) and secondarily computers (42%). Most HEIs have the basic infrastructure that allows students access to computers and the internet. By analyzing this data, it is possible to see that we have the opportunity to reach a larger volume of students with the internationalization virtualization model if compared to those who have access to face-to-face mobility.

In this sense, our proposal for sustainable internationalization converges with the concept of the Triple Bottom Line (TBL) or tripod of sustainability, which understands that innovation and value generation imply in the balance between economically viable, environmentally responsible and socially equitable (Elkington, 1997).

Thus, sustainable internationalization is understood as: 1. economically viable, as it implies in the reduction of operational costs for individuals and institutions, 2. socially equitable, as it considerably expands the academic communities' access to international education, and 3. environmentally responsible, as it develops, from its graduates, global citizens who are aware of their role as local agents of sustainable development.

Brandenburg et al. (2020) corroborate this perspective, by highlighting the importance of university social responsibility, linked to the concept of IHES. The conceptions defined by these authors present a new paradigm of the internationalization of higher education, in which universities' engagement with society is driven through internationalization. Importantly, the foundation of these conceptions reflects a larger understanding linked to the E2030 Agenda and the United Nations' Sustainable Development Goals.

In the post-pandemic context, the virtualization of internationalization may constitute a strategy that complements physical mobilities, enabling an accessible internationalization model that reaches students unable to travel for personal or financial reasons (Cassol-Silva & Morosini, 2017; O'Dowd & Beaven, 2019). The research results allow us to infer that the internationalization experiences developed by Brazilian HEIs during the COVID-19 pandemic support a new stage of development of higher education internationalization in the country, guided by virtual collaboration. Furthermore, as Kolm, de Nooijer, Vanherle, et al. (2021) note, conducting the virtual exchanges during and after the COVID-19 pandemic provides an opportunity for developing international and intercultural online collaboration skills. This model presents itself as a more sustainable and inclusive model, allowing greater access to students who do not have the financial conditions to have significant international experiences in their education. It is also observed that there is a tendency for this new model to improve in the post-pandemic period.

Final considerations. The pandemic scenario presented a context of transformation, with systematic actions, including collaborative interaction between local policies and global policies. At the end of this study, some considerations emerge in relation to the new stage proposed for the development of the Internationalization of Higher Education: the virtualization of IaH. This is a perspective that emerges from the challenges imposed by the pandemic on HEIs around the world and consolidates a sustainable internationalization model and constitutes movements of a new era in the internationalization of higher education.

It is possible to consider that the models of internationalization of higher education based on regional cooperation networks and that use the DICT will be the most driven in the next decades, given the pandemic period. A window of opportunity opens for the Internationalization of Sustainable Higher Education: the virtualization of network-based IaH. The emphasis on the processes that have enabled Internationalization of the Curriculum, at home and online for a larger number of students have constituted movements of a new era in the internationalization of

sustainable higher education. Virtualization is an opportunity for the continuity of internationalization policies in Brazil and the Global South in the post-pandemic context, even though there is a digital divide within the country and the continent (IESALC, 2020).

Faced with the budget limitations that LAC countries will face as a result of the crisis caused by COVID-19, as well as various limitations that precede the pandemic period, the incorporation of technologies in internationalization actions may represent an opportunity to expand the international and intercultural experience, from of IaH in Brazil and in the region. These indications contribute to the sustainability of internationalization, as pointed out by the data from the survey conducted with the well evaluated Brazilian HEIs in the ranking about the strategies adopted for the continuity of the internationalization actions of higher education during the pandemic of COVID-19.

Although a survey was carried out with HEIs that present a more consolidated internationalization process in relation to the other HEIs in the Brazilian university system, this is a limitation of this study. In future studies, it suggests that the potential that the DICT have to favor the internationalization of higher education be measured by quantitative or mixed methods, as well as the responses from HEIs that are not contemplated in the CAPES PrInt Program.

Acknowledgements

This research was conducted with the support of the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brazil (CAPES) - Funding Code 001, and the Conselho Nacional de Desenvolvimento Científico e Tecnológico (Research Fellowship 1A).

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.


Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Conselho Nacional de Desenvolvimento Científico e Tecnológico - Brazil (CNPq) (ResearchFellowship PQ. 1A) and Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brazil (CAPES) (Finance Code 001).

Notes on contributors

The authors would like to thank the research collaborators for their time and seriousness in answering the questions. Their participation and the data provided were indispensable for this article.

ORCID iD

Vanessa Gabrielle Woicolesco  <https://orcid.org/0000-0002-3058-8808>

Note

1. “The term ‘collaborative online international learning’ combines the four essential dimensions of real virtual mobility: it is a collaborative exercise of teachers and students; it makes use of online technology and interaction; it has potential international dimensions; and it is integrated into the learning process” (de Wit, 2017, p. 84).

References

- Altbach, P. G., & Hazelkorn, E. (2018). Measuring education quality in global rankings: what’s the likelihood? *International Higher Education*, 95 (Fall 2018), 12–14. <https://doi.org/10.6017/ihe.2018.95.10721>
- Beelen, J., & Jones, E. (2015). Redefining internationalization at home. In L. Curai, R. Matei, R. Pricopie, J. Salmi, & P. Scott (Eds.), *The European higher education area: between critical reflections and future policies* (pp. 67–80). Springer.
- Brandenburg, U., de Wit, H., Jones, E., & Leask, B. (2019). *Internationalisation in higher education for society – A new agenda for future research in international education*. The University World News. https://www.researchgate.net/publication/340265083_Internationalisation_in_Higher_Education_for_Society_-_a_new_agenda_for_future_research_in_international_education.
- Brandenburg, U., de Wit, H., Jones, E., Leask, B., & Drobner, A. (2020). Internationalization in higher education for society (IHES). Concept, current research and examples of good practice (DAAD Studies). DAAD.
- Brandenburg, U., & Laeber, L. (2015). How do HEIs measure internationalisation today? Analysis of user profiles in the IMPI toolbox. *Internationalisation of Higher Education*, 2, 36–68. https://doi.org/10.1007/978-94-017-9553-1_268-1
- Bruhn, E. (2017). Towards a framework for virtual internationalization. *International Journal of E-Learning & Distance Education*, 32(1), 1–9. <https://files.eric.ed.gov/fulltext/EJ1159898.pdf>
- Cassol-Silva, C. C. (2019). Proposta de Internacionalização do currículo. In M. C. Morosini (Ed.), *Guia para a internacionalização universitária* (pp. 85–101). EdPUCRS.
- Cassol-Silva, C. C., & Morosini, M. C. (2017). As tecnologias da informação e comunicação como apoio à evolução da internacionalização do ensino superior. *Competência*, 10(2), 1–7. <https://doi.org/10.24936/2177-4986.v10n2.2017.547>
- de Sousa, J. V. (2017). Internacionalização da educação superior como indicador do Sinaes: De qual qualidade estamos falando? *Educação*, 40(3), 343–356. <https://doi.org/10.15448/1981-2582.2017.3.28979>
- de Wit, H. (2017). Global: COIL – virtual mobility without commercialisation. In G. Mihut, P. G. Altbach, & H. de Wit (Eds.), *Understanding higher education internationalization: insights from key global publications* (pp. 82–85). Sense Publishers.
- de Wit, H., Hunter, F., Howard, L., & Egron-Polak, E. (2015). *Internationalization of higher education. Study European parliament committee on culture and education*. European Union.

- Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21 st century business*. Capstone.
- Gacel-Ávila, J. (2012). Comprehensive internationalisation in Latin America. *High Educ Policy*, 25, 493–510. <https://doi.org/10.1057/hep.2012.9>
- Hudzik, J. (2015). *Comprehensive internationalization: Institutional pathways to success*. Routledge.
- Instituto Nacional de Estudos e Pesquisas Estatísticas Educacionais Anísio Teixeira (2020). Notas estatísticas - Censo da educação superior. <https://www.gov.br/inep/pt-br/areas-de-atuacao/pesquisas-estatisticas-e-indicadores/censo-da-educacao-superior/resultados>.
- Knight, J. (2020). *Internacionalização da Educação Superior: conceitos, tendências e desafios*. Oikos.
- Knobel, M., Lima, M. C., Leal, F. G., & Prolo, I. (2020). Desenvolvimentos da internacionalização da educação superior no Brasil: Da mobilidade acadêmica internacional à institucionalização do processo na universidade. *Educação Temática Digital*, 22(3), 672–693. <https://doi.org/10.20396/etd.v22i3.8659332>.
- Kolm, A., de Nooijer, J., Vanherle, K., Werkman, A., Wewerka-Kreimel, D., Rachman-Elbaum, S., & van Merriënboer, J. J. G. (2021). International online collaboration competencies in higher education students: A systematic review. *Journal of Studies in International Education*, 1–19. <https://doi.org/10.1177/10283153211016272>
- Leask, B. (2009). Using formal and informal curricula to improve interactions between home and international students. *Journal of Studies in International Education*, 13(2), 205–221. <https://doi.org/10.1177/1028315308329786>
- Leask, B., & Green, W. (2020). *Is the pandemic a watershed for internationalisation?* University World News. <https://www.universityworldnews.com/post.php?story=20200501141641136>.
- Marcelino, J. M., & Lauxen, S. L. (2018, novembro 30-31, novembro 1). O papel da IoC na internacionalização em casa [Conference session]. In Congresso Ibero-americano de Docência Universitária - O envolvimento estudantil na Educação Superior (p. 1–7). X Congresso Ibero-Americano de Docência Universitária. Porto Alegre, Rio Grande do Sul, Brasil. <https://ebooks.pucrs.br/edipucrs/acessolivre/anais/cidu/assets/edicoes/2018/arquivos/24.pdf>.
- Mittelmeier, J., Rienties, B., Gunter, A., & Raghuram, P. (2021). Conceptualizing internationalization at a distance: A “third category” of university internationalization. *Journal of Studies in International Education*, 25(3), 266–282. <https://doi.org/10.1177/1028315320906176>
- Morosini, M. (2011). Internationalization of the knowledge production on Brazilian Higher Education Institutions: international tradition cooperation and international horizontal cooperation. *Educação em Revista*, 27(1), 93–112. <https://doi.org/10.1590/S0102-46982011000100005>
- Morosini, M. C. (2017, December 6). Internacionalização da educação superior e integração acadêmica [Conference session]. Conferências UFRGS. Porto Alegre, Rio Grande do Sul, Brasil.
- Morosini, M. C., & Dalla Corte, M. G. (2018). Teses e realidades no contexto da internacionalização da educação superior no Brasil. *Revista Educação em Questão*, 56(47), 97–120. <https://doi.org/10.21680/1981-1802.2018v56n47ID14000>
- Morosini, M. C., Fernandes, C. M. B., Leite, D., Franco, M. E. D. P., Cunha, M. I. D., & Isaia, S. M. A. (2016). A qualidade da educação superior e o complexo exercício de propor indicadores. *Revista Brasileira de Educação*, 21(64), 13–37. <https://doi.org/10.1590/S1413-24782016216402>

- Neves, C. E. B., & Barbosa, M. L. D. O. (2020). Internationalization of higher education in Brazil: Advances, obstacles, and challenges. *Sociologias*, 22(54), 144–175. <https://doi.org/10.1590/15174522-99656>
- O'Dowd, R., & Beaven, A. (2019). *Examining the impact of virtual exchange*. Forum magazine. European Association for International Education. <https://www.eaie.org/our-resources/library/publication/Forum-Magazine/2019-winter-forum.html>.
- Regional Center for Studies for the Development of the Information Society (2020). TIC Domicílios – 2019. <https://cetic.br/pesquisa/domicilios/indicadores/>.
- Sampieri, R. H., Callado, C. F., & Lucio, M. P. L. (2013). *Metodologia de pesquisa*. Penso.
- Times Higher Education (2020). World University Rankings 2020. https://www.timeshighereducation.com/world-university-rankings/2020/world-ranking#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/stats.
- Toro, D. (2020). Educación Superior en Latinoamérica en una economía post-COVID. *Revista de Educación Superior en América Latina*, 8(julio-diciembre 2020), 45–52. <https://doi.org/10.14482/esal.8.378.8>
- UNESCO International Institute for Higher Education in Latin America and the Caribbean (2018). *Plan de acción de la conferencia regional de educación superior 2018-2028*. https://drive.google.com/file/d/1Mr_obMED-yv2RalSeC6L1YeStb1C9tiU/view.
- UNESCO International Institute for Higher Education in Latin America and the Caribbean (2020). COVID-19 and higher education: Today and tomorrow - Impact analysis, policy responses and recommendations. <http://www.iesalc.unesco.org/wp-content/uploads/2020/05/COVID-19-ES-130520.pdf>.
- United Nations Educational, Scientific and Cultural Organization (2021). *Global Flow of Tertiary-Level Students*. <http://uis.unesco.org/en/uis-student-flow>.
- United Nations Educational, Scientific and Cultural Organization (2021). *UNESCO figures show two thirds of an academic year lost on average worldwide due to Covid-19 school closures*. <https://en.unesco.org/news/unesco-figures-show-two-thirds-academic-year-lost-average-worldwide-due-covid-19-school>.
- Woicolesco, V. G., Morosini, M. C., & Marcelino, J. M. (2021). COVID-19 and the crisis in the internationalization of higher education in emerging contexts. *Policy Futures in Education*, 1-10. <https://doi.org/10.1177/14782103211040913>

Author Biographies

Vanessa Gabrielle Woicolesco: PhD student in Education at Pontifícia Universidade Católica do Rio Grande do Sul—PUCRS, a fellow by the Coordenação de Pessoal de Nível Superior—CAPES. Currently works as a Technician in Educational Affairs at Universidade Federal da Integração Latino-Americana (UNILA). Member of the Higher Education of the Higher Education Study Center (CEES/PUCRS) and the research group UNIVERSITAS/RIES, Study Group on University (GEU/UNEMAT/UFMT) and Study Group on Decolonial Research. His current research interests include Higher Education, internationalization, teacher's knowledge and university teaching. Email address: vanessa.woicolesco@edu.pucrs.br. Telephone: + 55 (51) 999821808. ORCID: <https://orcid.org/0000-0002-3058-8808>. (Corresponding Author).

Carla Camargo Cassol-Silva: PhD student in Education at Pontifícia Universidade Católica do Rio Grande do Sul – PUCRS. Doctoral Internship Program at Curtin University. Member of the Higher Education Study Center (CEES/PUCRS) and the research group UNIVERSITAS/RIES. Currently serves as Head of International Office at PUCRS. Her current research interests are internationalization of education, Internationalization strategies, and management. ORCID: <https://orcid.org/0000-0003-3917-4844>.

Marilia Morosini: Coordinator of the Center for Higher Education Studies at the Pontifical Catholic University of Rio Grande do Sul and the South Brazilian Network of Higher Education Researchers (RIES). Professor at the PUCRS School of Humanities. Ph.D. in Education from the Federal University of Rio Grande do Sul (UFRGS). Developed post-doctoral research at LILLAS/University of Texas. Fellow 1A CNPq (National Council for Scientific and Technological Development). He has been a professor at UFRGS for over 25 years. His current research interests include Higher Education, with a focus on internationalization, quality, and higher education encyclopedias. ORCID: <https://orcid.org/0000-0002-3445-1040>.