INTERNACIONALIZANDO-SE: OS DESAFIOS PARA OS INSTITUTOS FEDERAIS DE EDUCAÇÃO, CIÊNCIA E TECNOLOGIA DO BRASIL

INTERNACIONALIZANDOSE: LOS DESAFIOS PARA LOS INSTITUTOS FEDERALES DE EDUCACIÓN, CIENCIA Y TECNOLOGÍA DE BRASIL

GOING INTERNATIONAL: THE CHALLENGES FOR THE BRAZILIAN FEDERAL INSTITUTES OF EDUCATION, SCIENCE AND TECHNOLOGY

RESUMO: O presente estudo baseia-se no pressuposto de que, no atual cenário de globalização, a visão do inglês como língua internacional e as iniciativas de internacionalização são essenciais para a construção de capital social e para promover a circulação da produção acadêmica. Com isso em mente, o objetivo deste estudo é duplo: oferecer uma meta-análise de uma série de estudos que investigaram a internacionalização do ensino superior brasileiro em universidades federais e, com base nessa meta-análise, elaborar considerações sobre os desafios enfrentados pelos Institutos Federais de Educação, Ciência e Tecnologia (IFs) para se internacionalizarem. Para isso, foi utilizada uma abordagem de meta-análise para avaliar e sintetizar os principais resultados dos cinco estudos incluídos na síntese. Além disso, um questionário semi-estruturado foi aplicado à representantes de dois IFs em uma tentativa de desvendar quais iniciativas de internacionalização foram implementadas nesse contexto. Os dados do questionário foram analisados qualitativamente e uma discussão dos dados foi fornecida levando em consideração a natureza dos programas e ações oferecidos por essas instituições para se internacionalizarem, bem como os desafios que enfrentaram nesta jornada.


RESUMEN: El presente estudio está basado en las suposiciones de que, en el escenario globalizado actual, la visión del inglés como lengua internacional y las iniciativas de internacionalización, son esenciales para la construcción de capital social y para facilitar la circulación de la producción académica en todo el mundo. Con eso en mente, el objetivo de este estudio es doble: ofrecer una meta-ánalisis de estudios que investigaron la internacionalización de la enseñanza superior brasileña en universidades federales y con base en esa meta-ánalisis, elaborar consideraciones sobre los desafíos enfrentados por los Institutos Federales de Educación, Ciencia y Tecnología (IFs) para internacionalizarse. Para aquellos, fue utilizado un abordaje de meta-ánalisis para evaluar y sintetizar los

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principales resultados de los cinco estudios incluidos en la síntesis. Sumado a lo anterior, un questionario semiestructurado fue aplicado al equipo de la administración de dos de los IFs en un intento de develar cuáles fueron las iniciativas de internacionalización implementadas en ese contexto. Los datos del questionario fueron analizados cualitativamente y una discusión de los datos fue disponibilizada tomando en consideración la naturaleza de los programas y acciones ofrecidas por esas instituciones para internacionalizarse, como también, los desafíos que enfrentan en esta jornada.


ABSTRACT: The present study assumes that, in a globalized world, the view of English as an international language and internationalization initiatives are essential to foster social capital and the circulation of academic production worldwide. The aim of this study is twofold: to offer a meta-summary analysis of some studies which investigated the internationalization of Brazilian higher education carried out mostly in federal universities, and, based on this analysis, to draw considerations regarding the challenges faced by the Brazilian Federal Institutes of Education, Science and Technology (IFs) to go international. In order to do so, a meta-summary approach was used to appraise and synthesize the main findings of the five studies included in the synthesis. In addition, a semi-structured questionnaire was administered to two IFs representatives as an attempt to unveil which internationalization initiatives have been put into practice. Data of the questionnaire was analyzed qualitatively and a discussion is provided taking into account the nature of the programs and actions offered by these institutions to go international as well as the challenges they have faced so far.


Introduction

Hudzik (2011) defines internationalization as a commitment, confirmed through action, to include international and comparative perspectives in the teaching, research and extension activities of higher education. Knight (2005) proposes that we look at internationalization relating it to its goals, benefits, values, consequences and implications such as whether it is sustainable, how institutions are responding to competing interests, what are the political and financial implications stemming from the growing emphasis on internationalization at the national and institutional levels, how are governments and nongovernmental organizations resolving the difficulties and moving forward and whether internationalization is a response to or an agent of globalization. Aligned with Knight (2005), we think that the reflection on the aforementioned questions may foster a critical and sustainable internationalization that benefits more players.
The process of internationalization is very complex for Brazilian higher education in general and it is becoming a greater challenge for the Federal Institutes of Education, Science and Technology (IFs) because of their singularity. Similarly, to other higher education institutions, IFs also provide teaching, research and service in extension activities. However, IFs offer education in multi levels that go from basic education to postgraduate courses, focusing mainly on professional and technical curricula.

Brazilian IFs form a public network of 644 campuses offering many courses at different levels and in several areas of knowledge, in face-to-face and distance learning formats. Such levels comprise vocational and technological education integrated in secondary education, teaching and bachelor’s degrees, and some post-graduate programs. IFs are part of the Federal Network of Vocational, Scientific and Technological Education Institutions (VSTEI) which are socially committed to offer, free of charge, public professional education to young people and workers from the metropolitan areas and the countryside.

Altbach and Knight (2007) claim that globalization includes aspects which are relevant to internationalization such as the integration of research, the use of English as an academic lingua franca (Jenkins, 2013) and as a language of publications (Hamel, 2013) and the use of technologies for communication. According to these authors, though globalization cannot be altered, internationalization can, despite the fact that the global North seems to have more power in the choices related to this change and as a consequence, accrue more benefits in the process of internationalization (Vavrus; Pekol, 2015) than the global South.

In a simple, naive view of these two processes, we can see globalization as a process of erasing the borders between nations while internationalization can be seen as a process of strengthening the links between higher education institutions and research in different nations. Yet, according to some authors (e.g.: Andreotti, Pereira, Edmundo, & Araújo, 2016; Hamel, 2013; Menezes de Souza, 2015; Santos, 2011; Vavrus & Pekol, 2015), this "pretty" picture of globalization/internationalization can also be a way to solve the problems related to the lack of funding for higher education in the North while most institutions in the South are paying the price without benefiting from these two processes.

4 Santos (2011) defines the global North as the geopolitical region formed of central countries whereas the global South would include peripheral countries, even if they are geographically located in the Northern hemisphere.
Others (ALTBACH; KNIGHT, 2007; SANTOS, 2011) note how international higher education has become a commodity, a private good to be freely distributed through the world market, instead of a governmental responsibility. Altbach and Knight (2007) observe that academic mobility is influenced and impacted by this current emphasis on free trade. Besides the apparent conceptual confusion between the notion of globalization/internationalization, the latter can have different meanings in the complex scenario we live in. Knight (2004) explains that internationalization has often been linked or understood to mean different things such as academic mobility, partnerships, international academic programs and research initiatives and international education trade, to name a few. Regarding academic mobility, if we analyze the flow of international students we may corroborate the claim of the aforementioned authors who see internationalization as benefiting more the North than the South. Lima and Maranhão (2009) describe the process of sending students as "passive internationalization" whereas most institutions in the North have an "active internationalization" by attracting most of these international students (and funds).

Regarding the situation of Brazilian institutions, most of which are "passive" (LIMA; MARANHÃO, 2009) and in the global South, Rajagopalan (2015) claims that these institutions are gradually moving down in international rankings, not because of the quality of their researches, but because of their invisibility. Despite criticisms regarding the use of international rankings to measure the status of institutions in the South (KAWACHI; AMORIM; FINARDI, 2017), or the language in which most research is published in Brazil (FINARDI; FRANÇA, 2016), it is clear that the invisibility of Brazilian research (GARCEZ, 2017) affects its attractiveness and possibility to engage more actively in the process of internationalization.

In order to draw some considerations on the panorama regarding the internationalization of Brazilian higher education as well as about the IFs’ challenges towards becoming internationalized, a look at internationalization initiatives of both, a Federal University and two Federal Institutes - the Federal Institute of Espírito Santo (IFES) and the Catarinense Federal Institute (IFC) is offered. The next section presents the procedures for data collection and analysis.

Method
The aim of this study is twofold: to report on the main findings of some studies which investigated the internalization of Brazilian higher education carried out mostly in a federal university context and to know the challenges faced by the Brazilian Federal Institutes of Education, Science and Technology (IFs) to go international.

In order to do so, this study used a meta-summary approach as an interpretative strategy to appraise and synthesize the main findings of five studies, comparing them in six main domains, namely: objectives of the studies, instruments of data collection, sample composition, theoretical background, major findings and conclusions/implications of the studies.

Decision on the articles to be reviewed took into account the research carried out by the research group entitled Internationalization, English and Technology (INTEC) which aims at understanding the interface between internationalization, English and technology. From the publications of the group, just the articles that dealt more specifically with the analysis of internationalization and English were selected.

Regarding the challenges for internationalization faced by IFs, two types of data collection were carried out. First, a document search on the webpages of both IFs so as to investigate the existence of International Relations Offices (IRO)\(^5\) and their acting scope as well as to analyze specific official documents regarding internationalization. Second, a semi-structured questionnaire was administered to the IRO staff of two IFs as an attempt to unveil which internationalization initiatives have been put into practice. Data of both IRO's webpages and the questionnaire were analyzed qualitatively and an ensuing discussion was provided taking into account the nature of the programs and actions offered by these institutions to go international as well as the challenges they have faced so far. The next three sections present the results of the analysis carried out in the present study.

**Internationalization: the case of federal universities in Brazil**

In a series of studies about the internationalization of Brazilian higher education (AMORIM; FINARDI, 2017; FINARDI; FRANÇA, 2016; FINARDI; GUIMARÃES, 2017; FINARDI, LEÃO; PINHEIRO, 2016; FINARDI; ORTIZ, 2015; FINARDI; PORCINO, 2014, 2015; FINARDI; PREBIANCA, 2014; FINARDI; SANTOS; GUIMARÃES, 2016; KAWACHI et al, 2017; TAQUINI; FINARDI; AMORIM, 2017)\(^5\)

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\(^5\) The webpage for the IRO of IFC was accessed in September 2016, when data for the present analysis was collected, but it is not currently available anymore.
carried out by one or more of the authors of the present study, most of which were accomplished in a federal university in Brazil, the overall conclusion was that foreign languages, in general, and English, in particular, played an important role in the process of internationalization.

Regarding the role of English in Brazil and in the internationalization of Brazilian institutions, Finardi (2014, 2016a, b, c, 2017) claimed that there needs to be an alignment between language, educational and internationalization policies so as to foster multilingualism and the visibility of the Brazilian academic production as well as the Brazilian attractiveness to become more active in Lima and Maranhão's (2009) sense.

So as to offer a glimpse of how languages relate to the internationalization of higher education in Brazil, a meta-analysis was carried out to critically appraise the main findings of five studies carried out in a federal university in the Southeast region of Brazil (AMORIM; FINARDI, 2017; FINARDI; FRANÇA, 2016; FINARDI; GUIMARÃES, 2017; FINARDI; ORTIZ, 2015; FINARDI et al, 2016). The studies reviewed here aimed at analyzing internationalization and the role of English in that process. The results of the meta-analysis are presented in Table 1.

Table 1: Meta-summary of studies on internationalization at a federal university

<table>
<thead>
<tr>
<th>Study</th>
<th>Objectives</th>
<th>Instruments of data Collection</th>
<th>Sample Composition</th>
<th>Theoretical background</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amorim &amp; Finardi, 2017</td>
<td>To analyze internationalization in three levels: micro (perception of academic community), meso (institutional actions) and macro (national programs and policies).</td>
<td>Questionnaires and interviews.</td>
<td>1649 participants.</td>
<td>Knight, 2004</td>
<td>Micro level-community not engaged Meso level - institution motivated but not yet internationalized Macro level- lack of convergence between language, education and internationalization policies.</td>
</tr>
<tr>
<td>Finardi &amp; França, 2016</td>
<td>To analyze academic production in English of Linguistics area.</td>
<td>Calculating publications in English and in Portuguese and correlation with citations.</td>
<td>Six journals between 2008-2014.</td>
<td>Warschauer, 2003 Varghese, 2013.</td>
<td>Low impact (citations) of Brazilian production because of the language in which it is published.</td>
</tr>
<tr>
<td>Finardi &amp; Ortiz, 2015</td>
<td>To analyze and to compare the internationalization in two institutions, one public and one private.</td>
<td>Analysis of websites, curricula and interviews.</td>
<td>Two Business Administration courses in Brazil.</td>
<td>Warschauer, 2003.</td>
<td>The public institution is more motivated to go international than the private one because the domestic market is...</td>
</tr>
</tbody>
</table>
Going international: the challenges for the Brazilian Federal Institutes of Education, Science and Technology

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<th>Source: Authors’ data</th>
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Overall, we can summarize the findings the studies reviewed in Table 1 as the following: Brazilian public universities are eager to go international though they are not yet fully engaged in internationalization practices, mainly because of language barriers, be them to send academics abroad (mobility type OUT), to receive foreigners (mobility type IN) or to include international aspects in their curricula (internationalization at home). To verify how these findings may relate to the context of Federal Institutes in Brazil, a case study was carried out and is described in what follows.

**Internationalization: the case of the Federal Institute of Espírito Santo (IFES)**

The Federal Institute of Espírito Santo (IFES) is composed of 22 campuses which share common objectives and goals described in the IFES Institutional Development Plan (PDI). Internationalization of post-graduate programs is one of the 34 strategic projects of the PDI for the years 2014 to 2019. According to this document, IFES is supposed to implement policies focusing on educational actions of teaching, research and extension regarding some dimensions, including internationalization. The latter is defined by IFES’s PDI as the “development and implementation of programs that strengthen the internationalization of IFES with academic networks, expanding opportunities for academic mobility, and for scientific and technological production and its dissemination” (IFES, PDI, 2014-2019, p. 68). However, the same document seems to understand internationalization as extension actions only: there is only one program of extension...
focusing on internationalization developed by Campus Serra. This campus plans international actions for the years 2014 to 2019 when investments are to be doubled in this area.

In order to go international, IFES created an IRO (Arinter) to develop, guide and promote its international policies. Arinter has already established international cooperation with universities and institutions from Italy, France, Portugal, Ireland, Netherlands, Germany and Canada. According to Arinter’s coordinator, it has the support of IFES’s institutional direction, linguistic-cultural dissemination agencies, embassies and consulates from many countries. The coordinator also considers that it is necessary to contextualize IFES’ internationalization as a transversal process with a clear and objective policy, as well as a method of evaluation to map internationalization actions. Based on the data available on Arinter’s webpage, it has been observed that programs like the Science without Borders (SwB) and the Languages without Borders (LwB) played a crucial role in the development of IFES internationalization. In other words, the main actions taken were related to academic mobility (type OUT) facilitated by these Brazilian governmental programs. Even though these actions might promote the development of language policies in order to overcome language barriers, those proficiency tests are required by programs like SwB, which focus on mobility type OUT only and thus, on a “passive internationalization” (LIMA; MARANHÃO, 2009).

To draw some considerations regarding IFES’s challenges to go international, a member of IFES IRO staff who works directly with IFES’s internationalization projects, hereby referred to as Informant 1 (I1), answered a semi-structured questionnaire aimed at investigating the most significant challenges for IFs, in general, and for IFES, in particular, to go international. I1 pointed out that VSTEI does not have any internationalization policies, such as strategies or objectives for academic mobility, language teaching or academic cooperation. Besides that, I1 noted that the National Council for the Federal Network of Vocational, Scientific and Technological Education Institutions (CONIF) does

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7 The list of memorandums of understanding to establish cooperation among IFES and international universities and institutions are available on [http://www3.ifes.edu.br/institucional/4843-arinter?start=3](http://www3.ifes.edu.br/institucional/4843-arinter?start=3).

8 Source: [https://www.youtube.com/watch?v=I7yOO01-NdU](https://www.youtube.com/watch?v=I7yOO01-NdU).

not have any strategic plan for going international either. There is also little overall understanding of the need for investments in foreign language policies.

When addressing the case of IFES, I1 explained that IFES does not have an internationalization policy document which clearly and objectively lays out the strategic goals for academic mobility, language learning/teaching and academic cooperation. Another problem has to do with the lack of human capital at IFES: currently, the IRO staff is composed of a coordinator and one intern only. Likewise, as pointed out by I1, IFES community (staff and students) has little foreign language proficiency, which represents a challenge to internationalization.

Internationalization: the case of the Catarinense Federal Institute (IFC)

The Catarinense Federal Institute (hereby IFC) was created in 2008 and is composed of 16 campuses located across the state of Santa Catarina, in the South of Brazil. In order to support internationalization policies, an IRO was created in 2013 under the coordination of the IFC Extension Provost (PROEX), with the objective of fostering the consolidation of cooperation agreements with foreign universities as well as supporting IFC staff and students to apply for international programs. In its Strategic Plan (2013-2017), the IFC also expresses its concern with going international, as Goal 34 (out of 38 goals, in total) states that it is the intention of the Institution to establish national and international partnership programs.

Based on that, a search on the webpage of IFC IRO was carried out in September 2016 and revealed that, since 2013, this Institute has implemented some actions as an attempt to foster internationalization, such as: English training for IFC staff at Alamo Colleges and the internship program of Ohio State University for IFC students. Although the aforementioned webpage did refer to the English online course My English Online sponsored by the Brazilian government as part of the program English without Boarders (EwB) of the Ministry of Education, no additional information about specific actions regarding this program was provided. Nonetheless, it is presumed that the IFC has been involved in the administration of standardized English proficiency tests (TOEFL and TOEIC Bridge), one of the main actions related to the Brazilian program EwB.

In order to have a better understanding of the scope of each internationalization program put together by IFC with the aim of going international, some of their
characteristics were analyzed, such as the program objective, number of times it was implemented and when, selection criteria of participants, number of applicants and number of candidates selected in each version of the program.

Concerning the English training for IFC staff at Alamo Colleges, the documental analysis revealed that the Call for the selection of candidates was published only once in 2014 – Call 462/2014\(^{10}\) - and it aimed at selecting four professors to spend four weeks at Alamo College, in Santo Antonio, Texas. According to the information on its webpage, the Santo Antonio College offers “intense courses in English as a Second Language (ESL) for nonnative English speakers. Each course is designed to equip students with the language skills necessary for successful academic and social interaction”.\(^{11}\) The selection criterion for this specific program included an online English test. A total of eleven professors applied and nine were classified. From these nine, it is presumed that the first four were selected for the training abroad.

Another action to foster the internationalization of education implemented by the IFC was the internship program offered by Ohio State University (The Ohio Program - TOP). A brief look at TOP's webpage\(^{12}\) revealed that this is an international exchange program specialized in internships for Horticulture, Agriculture and Turf Grass.

The data retrieved from IFC IRO's webpage shows that TOP was implemented three times, from 2013 to 2015. In spite of that, the download from the site of official documents regarding the year 2013 such as the Call and the list of applicants selected was not available at the time of data collection.

For the 2014 version of TOP (Call 460/2014) the number of applicants was not specified in the Call, probably due to the nature of the program, which accepts applications during the whole year and offers paid on-the-job training. In order to be able to apply, IFC students were supposed to fulfill the requirements specified in the Call, which among other things, demanded an intermediate level of proficiency in English of applicants and willingness to live and adapt to social and cultural diversity. Besides these, applicants should provide the application form and a résumé (both in English), a Brazilian Portuguese version of their school report and two letters of recommendation in English, being one of them written by an IFC professor. The process of selection included the verification of

\(^{10}\) All the Calls, list of applicants and other documents related to the partnership programs implemented by the IFC were not made available in this paper due to space constraints.


whether applicants fulfilled the initial requirements, the analysis of the documents provided and an interview with a staff from Ohio State University through a Skype call. For this version of TOP, four students were selected.

Similarly to the 2014 Call, the Call for the 2015 version of TOP (Call 70/2015) also did not specify the number of applicants, probably due to TOP’s nature, as previously explained in this paper. The criteria for application and selection mirrored the ones specified for Call 460/2014. A total of four students were selected in the third version of TOP implemented by the IFC.

Based on the data from IFC IRO’s webpage analyzed so far, it is possible to suggest that internationalization actions in the IFC context are still incipient and have poorly contributed to highlight IFC into the globalized scenario of education and research. It is also worth mentioning that, out of the 38 goals of the institutional Strategic Plan for the years 2013-2017, only one refers of the desire of IFC to go international, which, by the way, seems too shallow in scope. To reiterate, only Goal 34 relates to internationalization and states that IFC wishes to put together national and international partnership programs. In our view, this goal is too vague and general to foster the development of all aspects of internationalization. As we have stressed in the introduction of this paper, internationalization cannot be understood as the simple partnership between two international institutions. International mobility is an important part of internationalization, but it is not the whole story, thus we cannot affirm that international agreements are an internationalization goal in itself or by itself.

Data analysis also revealed that, regardless of other selection criteria, the mastering of English as an international language is an essential skill for those whose intend to apply for international partnership programs, a result that seems to corroborate the meta-summary analysis reported in this paper in relation to federal universities.

With the objective to unveil the reasons why the IFC has not been able to implement more consistent actions to go international, a semi-structured questionnaire was administered to an IFC staff, hereafter referred to as Informant 2 (I2), who oversaw planning and supervising internationalization actions at an institutional level. The main question of the questionnaire referred to the challenges faced by IFs, in general, and IFC, in particular, to go international. As put forward by I2, the greatest barrier to go international at that moment regarded the lack of proficiency in English of students and staff, which demands an investment of time and financial resources to overcome this
linguistic barrier. An example mentioned by the participant as an alternative to break the language barrier was the case of one University of Applied Science in Finland which invited foreign students to study and work together with their local students, making our students strive to learn English so as to be able to communicate with them.

Another problem tackled by I2 relates to the lack of grants and financial support to participate in exchange programs, both for sending abroad (mobility type OUT) and receiving students and staff from overseas (mobility type IN). A possible way to start overcoming this issue, in times of short investments by the government, would be to look for international exchange programs that do not lean on Brazilian grants. According to I2, the TOP (briefly described in this paper), offered by the State University of Ohio, is one such example. In this particular program, students need to be able to afford the initial costs of the trip, such as paying for airline tickets, visa and health insurance, however, because it is an on-the-job internship, students are paid for their period of study abroad, which makes the program self-sustainable.

In sum, the data reported revealed two main issues affecting negatively the internationalization process of IFs, in general, and of IFC, in particular – one that has to do with mastering foreign languages - English in this particular case -, and another that seems to reflect the historical ups and downs of Brazilian education in what concerns political ideologies and, consequently, educational policies and significant financial support. Taken together, results of the meta-analysis and the analysis of the IFs shows that challenges are similar in the two contexts analyzed, namely, federal universities and federal institutes. Moreover, results of the study suggest that challenges to go international in these two contexts are mostly related to lack of proficiency in foreign languages in general and in English as well as a dependency on government actions such as the SwB and the LwB programs which foster mainly a passive type of internationalization.

**Final considerations**

The main aim of this study was to meta-analyze five studies carried out in federal universities in Brazil so as to draw some considerations regarding the internationalization of federal institutes in that country. With that aim, a semi-structured questionnaire was administered to two representatives of two Brazilian IFs as an attempt to unveil which internationalization initiatives had been put into practice in those two contexts.
Overall results of the meta-analysis suggest that foreign languages in general and English, in particular, play a crucial role in the internationalization of federal universities in Brazil. The qualitative analysis of data from the federal institutes suggests that the scenario in that context is not very different and that English is also important in the challenges that federal institutes have to overcome to become internationalized. Moreover, data from the two federal institutes analyzed suggest that internationalization in that context is still passive (LIMA; MARANHÃO, 2009), dependent on national programs such as the SwB and LwB and mostly focused on the academic mobility type OUT.

The problem becomes especially complicated in a context of political and financial crisis, affecting education, a sector considered strategic for internationalization (KNIGHT, 2004). The case of Campus Serra / IFES demonstrates that. Although it was the only campus of IFES to plan internationalization actions, Campus Serra intended to double, until 2019, its investments in activities regarding internationalization. However, it will surely face difficulties because of recent cuts in funding for the sector. In order to overcome both financial and language barriers, and as suggested by one of the informants of this study, sustainable programs such as the one described at IFC may represent a relevant possibility for internationalization agendas, especially in times of scant financing to international education.

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