

INTERNATIONALIZATION OF HIGHER EDUCATION: A BIBLIOMETRIC
STUDY OF BRAZILIAN PRODUCTION

*INTERNACIONALIZAÇÃO DO ENSINO SUPERIOR: UM ESTUDO BIBLIOMÉTRICO
DA PRODUÇÃO BRASILEIRA*

*INTERNACIONALIZACIÓN DE LA EDUCACIÓN SUPERIOR: UN ESTUDIO
BIBLIOMÉTRICO DE LA PRODUCCIÓN BRASILEÑA*



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ABSTRACT: Internationalization is an important tool for meeting global demands, gaining more notoriety in higher education institutions. The objective of this work was to analyze some aspects of Brazilian publications on this topic. In this study, a bibliometric research was used based on publications contained in the CAPES Periodicals Portal, from 2007 to 2023. The descriptors “internationalization”, “higher education” and “Brazil” were used. The search returned 248 articles, of which 155 remained after reading the abstracts and excluding duplicates. It was possible to identify the publication index each year, Qualis, the journals with the largest publications, their characteristics and topics covered. There was an increase in publications over the first few years, with a predominance of publications in Qualis A journals, in the area of Education, highlighting terms such as mobility, education, policies and language. The results point to a growth in the theme as a field of scientific investigation in Brazil.

KEYWORDS: Internationalization. Higher education. Brazil. Bibliometry.

RESUMO: A internacionalização é uma importante ferramenta para o atendimento das demandas globais, ganhando mais notoriedade nas instituições de ensino superior. O objetivo deste trabalho foi analisar alguns aspectos das publicações brasileiras realizadas sobre este tema. Neste estudo, utilizou-se uma pesquisa bibliométrica a partir das publicações contidas no Portal de Periódicos da CAPES, de 2007 até 2023. Foram utilizados os descritores “internacionalização”, “ensino superior” e “Brasil”. A busca retornou 248 artigos, dos quais restaram 155 após a leitura dos resumos e exclusão dos repetidos. Foi possível identificar o índice de publicação a cada ano, o Qualis, os periódicos com maior publicação, suas características e temas abordados. Houve um aumento de publicações ao longo dos primeiros anos, com predominância de publicações em periódicos Qualis A, na área de Educação, destacando-se termos como mobilidade, educação, políticas e língua. Os resultados apontam um crescimento da temática como campo de investigação científica no Brasil.

PALAVRAS-CHAVE: Internacionalização. Educação Superior. Brasil. Bibliometria.

RESUMEN: La internacionalización es una herramienta importante para satisfacer las demandas globales, ganando cada vez más notoriedad en las instituciones de educación superior. El objetivo de este trabajo fue analizar algunos aspectos de las publicaciones brasileñas sobre este tema. En este estudio, se utilizó una investigación bibliométrica a partir de publicaciones contenidas en el Portal de Periódicos de la CAPES, de 2007 a 2023. Se utilizaron los descriptores “internacionalización”, “educación superior” y “Brasil”. La búsqueda arrojó 248 artículos, de los cuales 155 quedaron después de leer los resúmenes y excluir duplicados. Se logró identificar el índice de publicaciones de cada año, Qualis, las revistas con mayor cantidad de publicaciones, sus características y temáticas tratadas. Hubo un aumento de las publicaciones en los primeros años, con predominio de publicaciones en revistas Qualis A, del área de Educación, destacándose términos como movilidad, educación, políticas e idioma. Los resultados apuntan a un crecimiento del tema como campo de investigación científica en Brasil.

PALABRAS CLAVE: Internacionalización. Educación superior. Brasil. Bibliometría.

Introduction

The internationalization of higher education seems to be a recent topic, but it is a movement that has existed since the beginning of universities, back in the Middle Ages, when the first European schools emerged (Stallivieri, 2002). These places became known as *universities*, where the mobility of teachers and students from different regions was common, seeking to exchange knowledge in the few environments designated for this purpose (Charle; Verger, 1996; Pereira; Passos, 2015).

Since then, there have been many paths, challenges, and attempted definitions regarding what the internationalization of higher education is and how it influences and is influenced by external and internal factors. It is a growing area, marked by the expansion of activities in terms of volume, scope and complexity (Altbach; Knight, 2007).

The possibility of relationships between different countries, with different cultures, motivated by common objectives, often ends up placing internationalization as a synonym for globalization. Altbach and Knight (2007) explain that the concept of globalization is related to economic aspects and that internationalization is related to the set of policies developed by institutions to meet the demands of the globalized world. Therefore, we can say that globalization influences the way in which educational institutions organize themselves to meet global demands.

In a globalized world, professionals with global perspectives and willing to deal with international issues become essential (Shetty; Rudell, 2002). This relationship becomes even stronger when one realizes that in order to meet globalized demands, higher education, through its courses and forms of management, can contribute immensely to the training of these professionals (Knight, 2005).

It is worth noting that the internationalization process should not only be concerned with aspects related to countries, but also with their cultures and their connections with the global and the local (De Wit, 2013).

But what then would be the concept of internationalization? Knight (2004, p. 11, our translation) presents a definition that internationalization is a “process of integrating an international, intercultural or global dimension into the purpose, functions or provision of post-secondary education institutions or systems”. The author presents the definition as a process, something that is embedded in the university and that needs to be nurtured from all institutional spheres.

Due to the speed of changes occurring within institutions, the concept of internationalization has become broad and has many variations, which include new approaches and strategies that vary according to each context (Knight; De Wit, 2018).

Regardless of the concept used, the fact is that internationalization has been adopted by higher education institutions as a mechanism to meet the demands arising from globalization and that it has gained notoriety in educational evaluation processes (Sousa; Fuza, 2020).

As a result, the internationalization of higher education has had positive effects in different spheres. For students, it allows the development of skills focused on the world stage; for society, the concept of global community works; and for the institution, it is placed on the international stage (De Almeida Bizarria; Moreira; Do Nascimento, 2022).

Being attentive to meeting global educational needs, through the promotion of the internationalization of higher education, for countries like Brazil, is undoubtedly a fundamental process that will allow them to enter the international scene in a position to defend their sovereign interests (Luce; Fagundes; Mediel, 2016).

The process by which higher education institutions seek to internationalize has occurred at an accelerated rate in recent decades, and this has led universities to seek to establish themselves in this space, as internationalization will be a way to survive and compete on an equal footing with other national and international universities (Stallivieri, 2002). Among several reasons to internationalize, higher education institutions seek national security, the promotion of peace, the formation of national identity, economic growth, competitiveness, revenue generation, community development, improvement of academic quality, status, institutional development and its international reputation (Knight, 2004). It is worth noting that internationalization is a tool that makes it possible to achieve the aforementioned objectives, but that it is not the only way to guarantee the success of a higher education institution.

Given the various motivations presented and the growing search for understanding the topic, this article aims to identify and analyze some aspects regarding publications on the internationalization of higher education in Brazil based on the results found on the CAPES Periodicals Portal. This will allow us to identify how the theme, which is multifaceted, is being investigated in our country. It will also be possible to observe the evolution of research in the area and its insertion into the scientific scene.

Methodology

The present study is characterized as research with a quantitative, descriptive approach, originating from bibliometric research. It is descriptive research as its objective is to describe some characteristics of the population or phenomenon studied. In this case, we sought to describe the characteristics of bibliographic production in Brazil regarding the topic of internationalization of higher education.

Bibliometric research is defined as a “quantitative and statistical technique for measuring the production and dissemination rates of scientific knowledge” (Araújo, 2006, p. 12, our translation). For the development of this, the CAPES Periodicals Portal was established as a research tool, which is one of the largest virtual scientific collections that the country has, containing more than 39 thousand periodicals and 396 databases (Capes, s.d.).

After defining the database, collection was organized into 3 stages: (1) definition of descriptors; (2) identification and classification of the material found; (3) analysis of indicators.

To search for articles in the database, the descriptors were defined as “internationalization”, “higher education” and “Brazil”. As a search criterion, “articles” were adopted as the type of material being published in any language and at any time until the date of collection, which occurred on July 6, 2023. As a result of the initial search, 248 articles were obtained.

From these articles, the abstracts of each work were read to check whether they were in accordance with the investigative proposal of this study. After this procedure, articles with repeated titles and those that did not fit the research parameters were excluded. Texts related to editorials were also discarded. At the end of this process, 155 articles remained, which were used in the analyses. To identify the Qualis of the periodicals, the classification of the periodicals in the four-year period 2017-2020 was used.

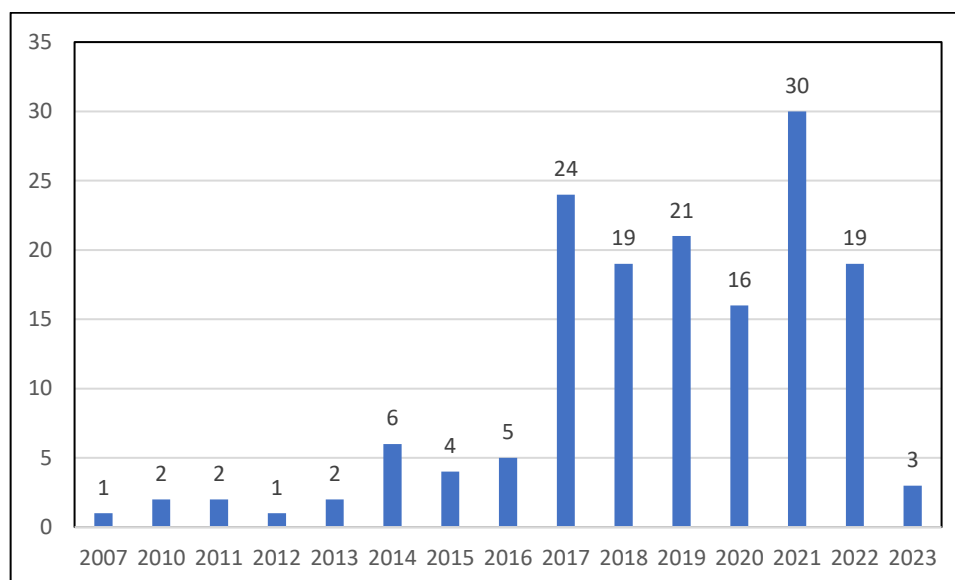
Analysis and Discussion

After using the procedures reported in the methodology, the data was organized and elements related to the publication rate each year will be presented below; the index of publications by Qualis; to periodicals with the highest number of publications; the characteristics of the periodicals and the topics covered based on the keywords.

In relation to publication rates per year, we can observe that the time interval of analysis occurred from the year 2007, the period in which the first publication in the area was identified

in Brazil, remaining until the present day. It is noted that during the years 2008 and 2009 there were no publications on the topic as seen in graph 1.

Graph 1 – Index of publications per year (2007-2023).



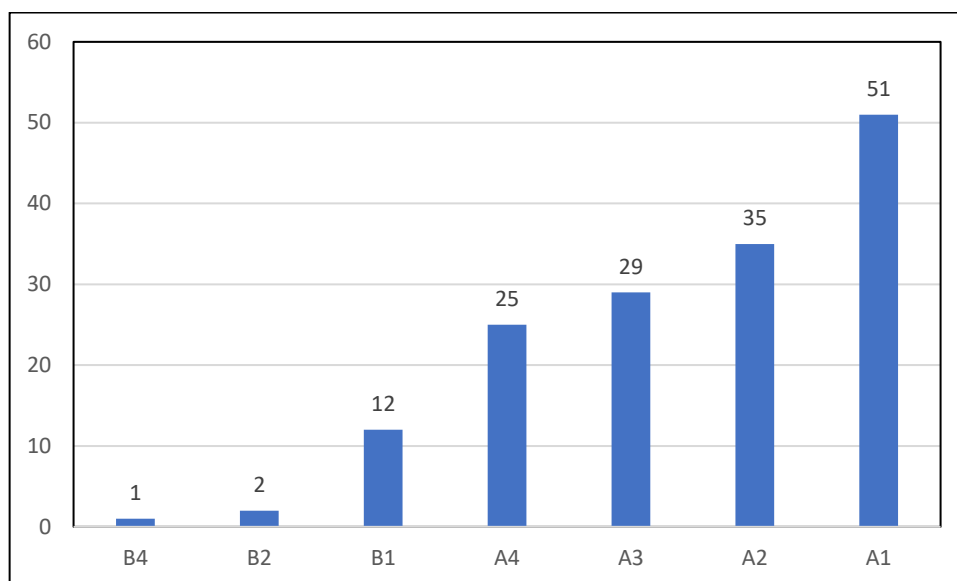
Source: Prepared by the authors.

It is also noted that the number of publications remained stable until 2016, with a considerable increase in the following year, which has continued since then. It is worth highlighting the year 2021, which presented the highest historical record of publications (30).

Some events may have contributed to the increase in publications on the subject, such as the start of the Science Without Borders Program (CsF). This federal program was created in 2011 and granted more than 101,000 scholarships to Brazilian students and researchers who were able to carry out research and internships at various institutions abroad (Manços; Coelho, 2017). This program was in force until 2016 and was responsible for promoting the internationalization of higher education in a way that had never been developed in our country. This may have motivated the increase in studies on the topic, as seen in the previous graph.

Of the publications carried out during the period analyzed, we can see in graph 2 that the publications are concentrated in strata B and A of the periodical classification for the 2017-2020 four-year period.

Graph 2 – Index of publications by Qualis.



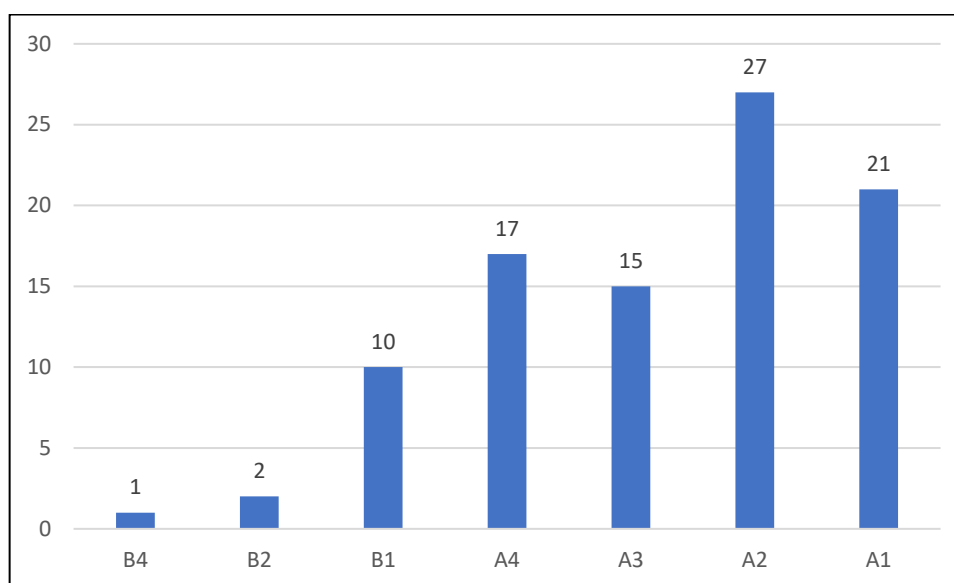
Source: Prepared by the authors.

According to the data found, the preponderance of publications is in stratum A, which concentrates 140 publications, with emphasis on publications in A1 journals (52). These results demonstrate the concern of authors in the search for well-evaluated journals that will consequently have a greater impact on the dissemination of their research.

Publications in well-evaluated journals reflect the need for higher education institutions to meet the demand generated by internationalization. According to Laus (2011), many universities have sought recognition based on an international quality standard, obtained from *rankings* that, among other factors, consider academic productivity as a variable for evaluation.

In this way, the publications found were distributed among 93 journals, which demonstrates the existence of a good space for publishing research related to the internationalization of higher education, as shown below.

Graph 3 – Index of periodicals by Qualis.



Source: Prepared by the authors.

For this analysis, the existence of a greater number of journals classified in stratum A (80) also stands out, with the majority being classified as A2 (26). These results contribute to strengthening research in the area, since the quality required by journals reflects on the quality of publications. Factors such as excellence, recognition, and national and international insertion are sought by institutions through their research. Publishing research results in highly ranked journals is a way of putting the researcher and the higher education institution in the spotlight. This demand, in turn, also demands from journals a higher quality criterion that contributes to the strengthening of science.

Among the journals identified in this study, a filter was carried out among those that were classified in stratum A, to identify the journals with the greatest demand for submissions. Journals that presented more than one publication were considered and the results will be presented in table 1.

Table 1 – Journals with the highest number of publications.

Periodical	Qualis	Number of publications
International Journal of Higher Education	A3	12
Education (PUCRS)	A1	6
Written Education	A4	6
Assessment: Higher Education Assessment Journal (Campinas)	A1	6
Education Policy Analysis Archives / Educational Policy Analytical Archives	A1	6
Essay: Assessment and Public Policies in Education	A1	6
Electronic Education Journal	A2	4
Works in Applied Linguistics	A1	4
University Management in Latin America Journal-GUAL	A4	3
Administration: Teaching and Research	A3	3
Brazilian Postgraduate Journal	A2	3
Studies in Educational Assessment	A1	3
Management and Secretariat Journal	A4	2
Script	A3	2
Acta Scientiarum. Human and Social Sciences	A2	2
Linguistic Forum	A2	2
e-Curriculum Journal	A2	2
Education and Research	A1	2
Education in Journal	A1	2
ETD Digital Thematic Education	A1	2
Ibero-American Journal of Studies in Education	A1	2

Source: Prepared by the authors.

The journal “Revista Internacional de Educação Superior” (A3) was the one with the largest number of publications (7). Another 5 journals had 6 publications each and of these we have 4 classified as A1 and 1 classified as A4. Table 2 presents the main characteristics of the journals presented above.

Table 2 – Characteristics of the periodicals with the highest number of publications.

Periodical	Qualis	Main area	Institution	Frequency
International Journal of Higher Education	A3	College education	Campinas State University	Continuous flow
Education (PUCRS)	A1	Education	PUCRS	Quarterly
Written Education	A4	Teaching	PUCRS	Continuous flow
Assessment: Higher Education Assessment Journal (Campinas)	A1	Education	Campinas State University	Continuous flow
Education Policy Analysis Archives / Educational Policy Analytical Archives	A1	Educational politics	Arizona State University	Continuous flow
Essay: Assessment and Public Policies in Education	A1	Education	CESGRANRIO Foundation	Quarterly
Electronic Education Journal	A2	Education	Federal University of São Carlos	Continuous flow
Works in Applied Linguistics	A1	Applied Linguistics	Campinas State University	Quarterly
University Management in Latin America Journal-GUAL	A4	University Management and Higher Education in Latin America	Federal University of Santa Catarina	Quarterly
Administration: Teaching and Research	A3	Public and Business Administration, Accounting and Tourism	National Association of Undergraduate Administration Courses (ANGRAD)	Quarterly
Brazilian Postgraduate Journal	A2	Education, science technology, international cooperation, innovation	Coordination for the Improvement of Higher Education Personnel (CAPES)	Semiannual
Studies in Educational Assessment	A1	Educational assessment	Carlos Chagas Foundation (FCC)	Continuous flow
Management and Secretariat Journal	A4	Multidisciplinary	Multi-institutional	Continuous flow
Script	A3	Literature of the Portuguese Language and Linguistics	PUC Minas	Quarterly
Acta Scientiarum. Human and Social Sciences	A2	Philosophy and Social Sciences	State University of Maringá	Continuous flow
Linguistic Forum	A2	Linguistics and Applied Linguistics	Federal University of Santa Catarina	Continuous flow
e-Curriculum Journal	A2	Education	PUC-SP	Continuous flow
Education and Research	A1	Education	University of Sao Paulo	Continuous flow

Education in Journal	A1	Education	Federal University of Minas Gerais	Continuous flow
ETD Digital Thematic Education	A1	Education	Campinas State University	Continuous flow
Ibero-American Journal of Studies in Education	A1	Education	State University of São Paulo	Quarterly

Source: Prepared by the authors.

Using this information, we can carry out an analysis from the point of view of the area, institution and periodicity of publications of the journals. The periodicals with 7 and 6 publications mostly present Education as the main area of publication (3), in addition to this, we also find the areas of Teaching (1), Higher Education (1) and Educational Policy (1). Regarding the institutions responsible for the periodicals, we have in this group public institutions (3), private institutions (3), national (5), and international (1). Regarding the periodicity of publications, we found periodicals with continuous flow (4), quarterly (1), and quarterly (1). In this criterion, the majority use the continuous flow publication system that makes the publication and dissemination of articles in the scientific world agile. The different areas of publication found in this work reinforce the argument that internationalization is a multifaceted process and can be approached from different approaches.

Thus, the keywords used in the articles analyzed in this study served as a basis for identifying the most developed themes in the published works. Based on this analysis, we can highlight some important terms in the articles such as, for example, education, higher education, mobility, teaching, policies, borders, internationalization, languages, training, academic, international, cooperation, university, among others. These terms reflect an approach to the internationalization of higher education in the aspects of mobility, languages, research, teaching and institutional development.

The theme of internationalization of higher education is very diverse, as it can cover studies relating to the application of concepts to the investigation of adopted practices (Terra; Lengler, 2016). There are countless possibilities for research, as this topic can move at different levels, as demonstrated in this study.

Final remarks

The main objective of this work was to carry out an analysis of the characteristics of Brazilian scientific production regarding internationalization, as this has been a common topic in higher education institutions. This concern may be combined with the search for prestige, good evaluations in international rankings, integration into the globalized world, improvement of teaching actions and development of new technologies. Finally, there can be countless reasons for an institution to internationalize.

Thus, internationalization has proven to be an important tool for higher education institutions that seek integration, service delivery and the development of solutions that are inserted in a global context. In Brazil, we can observe this growing movement when analyzing the increase in the number of publications over the years, which forces the idea of inserting internationalization into the daily lives of higher education institutions.

The evolution and improvement of processes only occur from the moment they begin to be seen and evaluated. The dissemination of results is essential for the topic to be known, debated and then re-discussed from new perspectives. Associated with the concern with the investigation of this topic, we also have the strengthening of the journals responsible for disseminating the scientific knowledge produced.

From this perspective, we observed that the results found regarding the classification of journals place Brazilian research at the highest level of publications, bringing visibility, responsibility and greater demands on the quality of work produced on this topic. The result of this reflects the possibility of improving internationalization actions in higher education institutions.

When we look at the themes presented in the keywords, we observe how extensive the research possibilities are in the area of internationalization of higher education. There is a vast territory to be explored and knowing the intentions of this investigation in Brazil will allow us to identify the paths and investigation panoramas followed.

Finally, we can conclude that the internationalization of higher education is a topic within the context of institutions and that requires continuous investigation so that its results are cohesive. The results obtained in this research indicate that Brazil has shown this concern, but there is still a lot to be done so that the theme actually becomes strong and permeates all environments of higher education institutions in the most diverse approaches. New analyzes need to be carried out in order to complement the results obtained here, as the discussion does not end at this point. The analysis can include other national and international databases,

production by authors, new terms, working networks between researchers from different institutions and countries, thus obtaining a more complete scenario on the topic.

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Author contributions: Jorge Luiz de Mendonça Ortellado Alderete: Text writing; Survey of articles on the Capes Periodicals Portal, according to the descriptors; Reading and refinement of articles selected for analysis; Analysis and discussion of the results found. Vilmar Malacarne: Writing and reviewing the text; Reading and refinement of articles selected for analysis; Review and adjustments to the writing of the Analysis and discussion of results.

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