# ACTIONS OF INTERNATIONALIZATION OF THE POSTGRADUATE PROGRAMS IN LIBRARIANSHIP, INFORMATION SCIENCE AND DOCUMENTATION: BRAZIL AND PORTUGAL

AÇÕES DE INTERNACIONALIZAÇÃO DOS PROGRAMAS DE PÓS-GRADUAÇÃO EM BIBLIOTECOMIA, CIÊNCIA DA INFORMAÇÃO E DOCUMENTAÇÃO: BRASIL E PORTUGAL

Raimunda Ribeiro 💿 Federal University of Maranhão, UFMA São Luís, MA, Brasil <u>ufmamidias@hotmail.com</u> Lídia Oliveira D University of Aveiro, UA Aveiro, Portugal <u>lidia@ua.pt</u>

Cassia Furtado 🔞 Federal University of Maranhão, UFMA São Luís, MA, Brasil cassia.furtado@ufma.br

**Abstract.** Study of the implemented actions by the Brazilian and Portuguese coordinators of the Graduate Programs of the areas of Librarianship, Information Sciences and Documentation for the internationalization and visibility of the academic and scientific work. This research is characterized as a study of multiple cases of qualitative-interpretative nature, using content analysis as a research technique. Its relevance lies in the field of Multimedia and Education and Information Science. For this purpose, interviews were conducted with the coordinators of the selected Programs as scenarios of this study, linked to Public Higher Education Institutions (HEIs) located in Brazil and Portugal. The results present the internationalization actions developed by the respondents through agreements, agreements and cooperation established with professors / researchers from foreign universities, aiming at professional qualification, as well as the establishment of partnerships for the development of collaborative writing for publications of works, preferably , in English language in indexed journals, for the development of research projects, participation in international events such as lecturers or for presentation of papers, as well as evaluators of international journals. Considering the results demonstrated by the information gathered through the interviews, it is concluded that these subjects recognize the potential of internationalization as a prerequisite for the expansion of the prestige and recognition of these scientific communities.

Keywords: internationalization; higher education; librarianship, information science and documentation; postgraduate programs, brazil and portugal.

**Resumo.** Estudo das ações implementadas pelos coordenadores brasileiro e português dos Programas de Pós-Graduação, das áreas de Biblioteconomia, Ciências da Informação e Documentação, para a sua internacionalização e visibilidade do trabalho acadêmico e científico. Esta pesquisa caracteriza-se como um estudo de múltiplos casos de natureza qualitativa-interpretativa, utilizando a análise de conteúdo como técnica de pesquisa. Sua relevância reside nos campos da multimídia e educação e ciência da informação. Para tanto, utiza-se de entrevistas com os coordenadores dos Programas selecionados, como cenário deste estudo, vinculado às Instituições Públicas de Ensino Superior (IES) localizadas no Brasil e em Portugal. Os resultados apresentam as ações de internacionalização desenvolvidas pelos entrevistados por meio de convênios, e cooperação estabelecidos com professores / pesquisadores de universidades estrangeiras, visando à qualificação profissional, bem como o estabelecimento de parcerias para o desenvolvimento de projetos de pesquisa, participação em eventos internacionalis, como palestrantes ou apresentação de trabalhos, bem como avaliadores de periódicos internacionalização como pré-requisito para a ampliação do prestígio e reconhecimento dessas comunidades científicas.

Palavras chave: internacionalização; ensino superior; biblioteconomia, ciência da informação e documentação; programas de pós-graduação, brasil e portugal.

## INTRODUCTION

The university, from its origin, has gone through several phases, and in each one of them can be evidenced a mission characteristic of its epochs. The first was: guarding and protecting the values of Christian civilization in its European origin, the second was directed towards its institutional and political responsibility as a producer of knowledge, the third was linked to its role of institution responsible for economic and social development, through technological innovation, and social and cultural change. The fourth is internationalization, which we will address in this study, emphasizing its conceptual aspects, and



its contribution in higher education, especially in the Graduate Programs, scenarios of this research (F. S. Santos & Filho, 2012).<sup>1</sup>

Traditionally, universities have emphasized the importance of achieving international academic standards. This motivation is driven to create the necessary mechanisms to attract international students, research projects and training at a high level. These actions aim at the competition in the domestic and international market for the guarantee of the best positions in the rankings. These change the positioning of institutional decision makers who are concerned to promote internal changes that lead their university to obtain a better place in the ranking and, thus, will try to have employees (teachers / researchers) adjust their behavior and professional attitudes to work in this sector. This is mainly due to globalization and its strong influence on the internationalization process of Higher Education (Pichincha, Marques, & Cabral, 2015).

Considering that the internationalization of higher education focuses on the university scientific system and the globalization in the internationalization of the economic and financial system, what are the converging and divergent points between the internationalization of education and globalization? Thus, in order not to simplify the complexity of the controversial topic of globalization and its relation with the internationalization of education, parameters must be established to frame the discussion. Therefore, a nonideological definition of globalization is adopted: the flow of technology, economy, knowledge, people, values and ideas across borders. Because it affects each country in a different way according to its history, traditions, culture and individual priorities of each country, state or region. Globalization is a multifaceted phenomenon and an important environmental factor that has multiple effects on education (Finardi et al., 2015).

Globalization clearly presents new opportunities, challenges and risks. However, it is important to emphasize that the focus of the discussion is not the globalization of education. And yes, highlight how globalization, as a process that affects internationalization. Thus, the internationalization over the centuries has been changing the world of education and globalization is changing the world of the internationalization. Considering that in the last decades, major efforts have been made to keep the focus on the internationalization of education, to avoid using the term globalization of education. Such efforts have achieved mixed results, with some successes being achieved to ensure that the relationship between these two terms may not be seen as synonymous, nor can they be used interchangeably (Finardi et al., 2015; Knight, 2004).

It is necessary to highlight the definition of the term internationalization and / or cross-border higher education taking into account its policies, regulatory institutions and the challenges that arise as it enters into force at the national, sectoral, institutional or international level. For Knight (2015) the major challenge of developing a definition is to take into account its application in different countries, cultures and educational systems with unique particularities and differences in each context. It is not an easy task because it involves a universal definition, guaranteeing a comprehensive meaning appropriate to different contexts and countries of the world. In this way, it's necessary a definition is needed, since these elements vary across nations and institutions. The crucial point is that the international dimension has to be related to all aspects of education and with the role that it plays in the society.

Based on these assumptions, the following definition is proposed: internationalization at the regional, national, sectoral and institutional levels is a process of integrating an international, intercultural or global dimension with objectives, functions that cover higher education, through international activities in a global academic environment, including academic mobility for students and teachers; international linkages through partnerships and projects; and new international academic programs and research initiatives, as well as new types of arrangements such as campuses or franchises, using a variety of techniques (Knight, 2004, 2015; Luce, Fagundes, & Mediel, 2016).

Another important aspect to be considered is that since its genesis, in the Middle Ages, the university works internationalization through international cooperation and collaboration, as a specific phenomenon of this universe that evolves almost thousand years after foundations such as the first the University of

<sup>&</sup>lt;sup>1</sup> This research is an integral part of a broader PhD research funded by CAPES / Brazil entitled "Internationalization and Visibility of the Scientific Community of Library Science and Information Science (Brazil and Portugal)", defended on November 21, 2018 at the University of Aveiro. This text presents partial results of this study, and was published in a summarized form in the ATAS CIAQ2018, entitled: Internationalization in the context of Higher Education.

Bologna (1088) and the following century, the universities of Oxford (1096), Salamanca (1218 / first Spanish university), Cambridge and Coimbra (1290 / first Portuguese university) (F. S. Santos & Filho, 2012).

Considering the valorous character given to the internationalization of higher education, as a synonym of search for knowledge without frontiers limiting with in order to improving professional performance in the most varied areas of knowledge, E. Santos (2017,p.64) emphasizes that

both masters and students circulated in Europe to avail themselves of an exchange of knowledge which at that time were made "new" as a result of the investigations / speculations they sought to confront (in this case, too, it is not necessarily a question of opposing) the caudate explanations of the religious worldview, correspondingly, of knowledge, knowledge and power.

It is considered that internationalization is not a new term, it has been incorporated in political science and government relations for centuries, but its propulsion in the education sector only emerged from the beginning of the 80s. Before this time, international education was the term used in some countries. In the 1990s, the discussion on the use of the term international education focused on differentiating comparative education, global education, and multicultural education. In the first decade of the 21st century, other related terms have emerged, including: transnational education, education without frontiers and crossborder education. However, it needs parameters to evaluate and promote higher education (Knight, 2004, 2015).

The difference between the term education without frontiers and cross-border education needs to be explored. It follows that the former emphasizes the disappearance of the frontiers and the second its existence. Both demonstrate the reality of the 21st century, where education presents the unprecedented growth of distance education. In these modes of teaching, geographical boundaries become irrelevant. However, there is a growing importance in relation to borders when the focus is on regulatory responsibility, especially in relation to quality assurance, financing and accreditation. For the relevance is not the existence or not of frontiers, but the innumerable possibilities that arise from the moment in which one has a superior education of quality, regardless of the origin of the geographic space of the responsible institution (Knight, 2015).

Among the administrative forms of internationalization is active and passive. These aspects are characteristic of this phenomenon, since it involves: flow of people, information, resources coming from foreign institutions, as well as from others with which academic cooperation agreements are established. In the passive form, the sending of students, teachers and researchers to foreign institutions predominates, as well as the publication of the scientific papers of these subjects in international journals, external to the IES. The active form is directed toward the establishment of policies directed by countries that turn to receive students in mobility and offer educational services abroad, export and create campuses in other countries (M. C. Lima & Maranhão, 2009; Marrara, 2007).

The promoters of the internationalization in the passive condition are mainly the members of the IES, who seek training in foreign institutions, develop research in them, publish their scientific results or perform other academic activities that result not only in personal improvement but also the promotion, whether intentional or not, of the name and scientific production of the IES of origin. Due to the set of activities and resources involved, passive internationalization depends greatly on the support of research and development agencies, which is why in Brazil, CAPES (Brazilian Agency for Postgraduate Education) and CNPq (National Science Foundation), and in Portugal the FCT (Foundation for Science and Technology) can be seen as the main drivers for the success of this form of internationalization (M. C. Lima & Maranhão, 2009; Marrara, 2007).

The recognition of these two forms is essential for the internationalization, especially of the Brazilian and Portuguese Postgraduate Programs, since these are:

- ✓ "They reveal different paths to academic internationalization, which should be chosen according to the strengths and weaknesses of each HEI.
- ✓ Enable clarity about the chosen form, presupposed for the IES to take concrete and coherent administrative and academic measures.
- ✓ They guide both the support policy of the funding agencies and support for research, as well as the evaluation of graduate programs by Capes in Brazil and by the A3ES in Portugal" (Marrara, 2007, p.254)).

Another aspect to be considered in the process of internationalization is that the expansion of the use of the Internet, and the online presence of universities creates a favorable environment for internationalization and also for the application of university performance. As a result, progress in the growth and acceptance of university rankings demonstrates its usefulness as an evaluation mechanism. Not only are they useful to policy-makers, but they also provide insight into the prestige of institutions. These actions are relevant and contribute to the capture of resources in an effective way for the financing of projects and the feasibility of scholarships for student mobility (students and teachers). These classifications also influence the choice of the students of the institution where they intend to effect their enrollment, serving as an attraction for foreign students (Filippo et al., 2012).

According to Filippo, Casani, García-Zorita, Efraín-García, & Sanz-Casado (2012), based on surveys of authors who study rankings, they affirm that the position of a university in a given ranking is fundamental for the promotion of its scientific activities, as well as the dissemination of its educational excellence, research, and its reputation and effectiveness in the transfer of knowledge. The position of each institution depends strongly of the categories and indicators used. However, many critics are against the formulation and lack of transparency of these indicators, the procedures applied for the weight of variables, with a strong tendency for scientific publications, to the detriment of other important aspects of the development of university activities.

Another preponderant factor to be considered in the context of the internationalization of higher education is the domain of English-speaking universities (which are also occasionally not the same universities as the MOOCS), as can be seen in the ranking of the 20 largest universities in the world, provided annually by the ARWU (Academic Ranking of World Universities). According to data from this ranking, approximately two-thirds of the world's top 100 universities belong to English-speaking countries, and the others have taken English-language courses in their curricula. In the 2005 list presented by Graddol, the top 20 universities belong to English-speaking countries, with the exception of the Ecole Polytechnique in France, the University of Beijing in China and the University of Tokyo in Japan. By the way, these three exceptions have websites in English and also offer courses in English (Finardi et al., 2015).

This issue leverages the analysis in today's society of how a university profile can affect its position on these lists. As well as what would be the best institutional strategies and the most suitable ones for gaining greater international visibility, since it is assumed that the mission of an HEI is directly related to its international prestige, based on the position it reaches in the list of international rankings. Thus, if it is necessary to consider that the production of knowledge with quality, the primary mission of universities is essential for the evaluation criteria to be presented in a clear and precise, as well as what to expect when analyzing the position of these HEIs in international rankings (Filippo et al., 2012).

Table 1 provides a summary of the results distributed by the regions. The leadership of the countries of North America is observed, having the largest number of universities in the Top 100 category, to the detriment of other continents such as the European, Asia, among them Brazil among others.

Region / Country	Top 100	Top 201	Top 500	Top 1000	Total
North America	79	123	212	398	3485
Europe	16	60	222	415	4975
Asia	3	7	38	104	6142
Oceania	1	6	15	35	149
Latin America	1	3	9	39	3486
Mexico		1	2	5	907
Brazil		1	5	17	1494
Chile		1	1	3	81
Argentina			1	3	105
Colombia				3	282
Peru				2	93
Venezuela				2	55
Costa Rica				1	60
Puerto Rico				1	40
Equador				1	70
Arabe World		2		4	569
Africa				5	355
Total					19161

Table 1. Principle numbers of the Web Ranking, July 2010.

Source: (Aguillo, 2011, p. 173).

Taking into account the relevance of the rankings for the clarification about the real benefits of these classifications for the purpose of recognition and validation of the academic and scientific work developed by the actors and institutions responsible for the consolidation of the scientific knowledge in a global scale, a survey was made in the academic rankings the World Bank of 2017 and 2018 published by Webometrics, THE, ARWU and QS in order to verify if there was an increase in the number of institutions ranked in the categories listed in tables 1 and 2 in the European, Brazilian and Portuguese context, considering the predominance of the first countries located in North America, especially the United States, as shown in Table 2.

World Rank	ARWU (2017)	THE (2018)	QS (2018)
1	Harvard University (USA)	University of Oxford (UK)	Massachusetts Institute of Technology, MIT (USA)
2	Stanford University (USA)	University of Cambridge (UK)	Stanford University (USA)
3	University of Cambridge (UK)	California Institute of Technology, Caltech (USA)	Harvard University (USA)
		Stanford University (USA)	
4	Massachusetts Institute of Technology, MIT (USA)		California Institute of Technology, Caltech (USA)
5	University of California, Berkeley (USA)	Massachusetts Institute of Technology, MIT (USA)	University of Cambridge (UK)
6	Princeton University (USA)	Harvard University (USA)	University of Oxford (UK)
7	University of Oxford (UK)	Princeton University (USA)	University College London, UCL (England)
8	Columbia University (USA)	Imperial College London (England)	Imperial College London (England)
9	California Institute of Technology, Caltech (USA)	University of Chicago (USA)	University of Chicago (USA)
10	University of Chicago (USA)	University of Pennsylvania (USA) Swiss Federal Institute of Technology, ETH Zurich (Switzerland)	Swiss Federal Institute of Technology, ETH Zurich (Switzerland)

Table 2. World Academic Ranking - ARWU, THE and QS.

Source: Shanghai Ranking<sup>2</sup>, Top Universitites<sup>3</sup>

It can be seen from the data presented in Tables 2 and 3 that the American continent continues to have the best positions in the 2017 and 2018 rankings. However, there has been an increase in the number of European Institutions classified as Top 100. On the other hand, a small number of Brazilian and Portuguese institutions, the scene of this investigation among the best positions in these rankings. This same fact occurs in other rankings such as ARWU, QS and THE. The best positions are under the domain of HEI in the American context with tradition in research and teaching (Table 3). We may not ignore the work that has been developed in other continents, especially in the two countries of this research, Brazil and Portugal, which in recent years has also managed to classify their HEIs in better positions and each year increases the number of these Institutions in these rankings.

Table 3. Web Ranking of Universities - Current Issue 2017.2

Region / Country	Top 100	Top 201	Top 500	Top 1000
North America	106	23	19	233
USA	92	18	18	198
Europe	59	52	45	331

<sup>2</sup> http://www.shanghairanking.com/ARWU2017.html

<sup>3</sup> <u>https://www.topuniversities.com/university-rankings/world-university-rankings/2018</u>

Portugal	-	02	01	11
Brazil	01	02	-	26

Source: Ranking Web of Universities<sup>4</sup>

Portugal presents in the 2017 edition of the World Ranking Webometrics, the University of Porto and the University of Lisbon in the Top 200 category, the University of Minho Top 300, the New University of Lisbon Top 400, the University of Aveiro Top 500 and the Institute Polytechnic of Oporto Top 1000. In that same year, it obtained the classification in the Academic Ranking of World Universities (ARWU) for the University of Porto the position 301-400, for the Universities of Aveiro, Coimbra and Minho 401-500. Already in the 2018 listing presented by QS World University Rankings has the University of Porto, the University of Lisbon and the New University of Lisbon in the Top 300 category, the University of Coimbra in the Top 400 and the University of Aveiro in the Top 500.

These results demonstrate the joint work that has been developed in these Portuguese institutions in partnership with teachers and researchers through their graduate programs, based on the effective use of the skills installed in their research units. "It is equally essential that both work in partnership to materialize an Integrated Knowledge Space, be it at the national, international, supranational or community level" (Santos & Filho, 2012, p.75).

When analyzing the most specific country rankings, in this case Brazil and Portugal, it can be observed according to the data presented in table 4, that in the Web of Universities Ranking of 2017, among the Portuguese HEIs ranked in the top ten positions are the University of Porto, University of Lisbon, University of Coimbra, University of Minho, New University of Lisbon, University of Aveiro, Polytechnic Institute of Porto, University of Beira Interior, University of Évora and Portuguese Catholic University. Taking into account the indicators considered by this Ranking, it can be inferred that these universities are evaluated for their excellence in teaching and research as well as for their performance in valuing the "visibility" indicator, thus investing positively in the activities developing and investing in open access to their scientific publications.

	Webometrics Academic			THE Latin America
Ranking	Ranking		Ranking	Ranking
	Portugal	Brazil		Brazil
1	University of Porto	University of São Paulo (USP)	1	Campinas State University (UNICAMP)
2	University of Lisbon	Federal University of Rio de Janeiro (UFRJ)	2	University of São Paulo (USP)
3	Coimbra University	Campinas State University (UNICAMP)	7	Federal University of São Paulo (UNIFESP)
4	Minho University	Federal University of Rio Grande do Sul (UFRGS)	8	Federal University of Rio de Janeiro (UFRJ)
5	New University of Lisbon	State University of São Paulo Júlio de Mesquita Filho (UNESP)	11	Federal University of Minas Gerais (UFMG)
6	Aveiro University	Federal University of Minas Gerais (UFMG)	12	State University of São Paulo Júlio de Mesquita Filho (UNESP)
7	Polytechnic Institute of Porto	Federal University of Santa Catarina (UFSC)	14	Federal University of ABC (UFABC)
8	University of Beira Interior	University of Brasilia (UnB)	15	Federal University of Santa Catarina (UFSC)
9	University of Évora	Federal University of Paraná (UFPR)	18	Federal University of São Carlos (UFSCAR)
10	Portuguese Catholic University	Federal Fluminense University (UFF)	19	University of Brasilia (UnB)

Table 4. Webometrics Ranking 2017: Portugal and Brazil and THE Ranking Latin America (Brazil)

<sup>&</sup>lt;sup>4</sup> http://www.webometrics.info/es/node/18

Source: Ranking Web of Universities<sup>5,6</sup>, Times Higher Education<sup>7</sup>

In the Portuguese context, the data presented in Table 4 are confirmed by those highlighted in Table 5. This aspect reaffirms the consolidation of the collaborative work that has been developed around teaching, research and knowledge production, focusing on quality as well as by the dissemination of academic and scientific activities in a network, providing visibility to all the actors involved in this process. These actions take on prestige and recognition and consequently better positions in the national and international rankings. It should be pointed out that in Table 5, some HEIs continued in leadership positions, such as the Universities of Porto, Lisbon, Coimbra and Minho. Others achieved better positions such as the University of Beira Interior, University of Tras the Montes and Alto Douro, and the University of Algarve.

Ranking	Webometrics Academic Ranking		Ranking	THE Latin America Ranking
2018	Portugal	ortugal Brazil 2018		Brazil
1	University of Porto	University of São Paulo (USP)	1	Campinas State University (UNICAMP)
2	University of Lisbon	Federal University of Rio de Janeiro (UFRJ)	2	University of São Paulo (USP)
3	Coimbra University	Campinas State University (UNICAMP)	4	Federal University of São Paulo (UNIFESP)
4	Minho University	State University of São Paulo Júlio de Mesquita Filho (UNESP)	7	Pontificial Catholic University of Rio de Janeiro (PUC-Rio)
5	New University of Lisbon	Federal University of Rio Grande do Sul (UFRGS)	9	Federal University of Minas Gerais (UFMG)
6	Aveiro University	Federal University of Minas Gerais (UFMG)	10	Federal University of Rio Grande do Sul (UFRGS)
7	University of Beira Interior	Federal University of Santa Catarina (UFSC)	11	State University of São Paulo Júlio de Mesquita Filho (UNESP)
8	University of Tras dos Monteis and Alto Douro	Federal University of Paraná (UFPR)	12	Federal University of Rio de Janeiro (UFRJ)
9	Polytechnic Institute of Porto	University of Brasilia (UnB)	14	Federal University of Santa Catarina (UFSC)
10	University of Algarve	Federal Fluminense University (UFF)	15	Federal University of São Carlos (UFSCAR)

Table 5. Webometrics Ranking 2018: Portugal and Brazil and THE Ranking Latin America (Brazil)

Source: Ranking Web of Universities<sup>5,6</sup>, Times Higher Education<sup>7</sup>

In the Brazilian scenario, still analyzing the data presented in tables 4 and 5, based on the results presented by Web Universities Rankings and THE Latin America from 2017 and 2018, it is observed that the top twenty positions in these Rankings that considers the best universities in this In this context, most of the universities are located in the southeast region of Brazil, such as the University of São Paulo, the Federal University of Rio de Janeiro, the State University of Campinas, the Paulista State University Júlio de Mesquita Filho, the Federal University of São Paulo, Federal University of São Carlos, Federal University of ABC, Fluminense Federal University. In the southern region of Brazil there are only three in this list, namely, the Federal University of Rio Grande do Sul, the Federal University of Paraná and the Federal University of Santa Catarina. In the center-west region there is only the University of Brazilia.

It should be considered as a positive point in this scenario that despite all the difficulties faced by Brazil today in the political and economic scenario that directly reflects the investments made, especially in higher education, there are well-ranked universities of excellence that invest in research and the visibility of the

<sup>&</sup>lt;sup>5</sup> <u>http://www.webometrics.info/en/Latin\_America/Brazil</u>

<sup>&</sup>lt;sup>6</sup> <u>http://www.webometrics.info/en/Europe/Portugal</u>

<sup>&</sup>lt;sup>7</sup> https://www.timeshighereducation.com/world-university-rankings/2017/latin-america-university-

rankings#!/page/0/length/25/sort\_by/rank/sort\_order/asc/cols/stats

institution, the scientific products generated by its researchers, as well as the open access to its production, data that are in line with the indicators evaluated by these Rankings.

On the other hand, these universities do not represent all the regions that Brazil contemplates and are left out the north and northeast regions in the best positions, with less prominence. This fact presupposes the greater investment in HEI located in these regions so that there can be a greater balance in these classifications.

It is unequivocal that the scenario of higher education is changing, and, therefore, there are significant transformations. And as can be observed based on Knight (2004) There are a number of reasons for these transformations, among which the following stand out: development of information and communication technologies, increased international labor mobility, emphasis on the market economy and trade liberalization, focus on the knowledge society, private investment, declining public support for education, and lifelong learning. Thus, the international dimension of higher education takes on a more significant and at the same time more complex character.

In this context, the value given to scientific knowledge from the genesis of the university to contemporaneity is observed, since it is considered a common good, with added value for the whole society. Therefore, the need to generate knowledge with a focus on quality must be a priority in civil society and in the bodies that represent it. Then, the only way for universities and institutions directly involved with teaching and research to have a reputation and representation on the local, regional, national and international scenary today is through the presence of better rankings. Hence the need for investment in public policies that guarantee programs that enable the development of research and the production of knowledge in academic environments. In this way, it must value and invest equally in the permanent qualification of the actors responsible for the by generation of science and technology in the global context (Piccone & Jousset, 2011).

With regard to the legal support for the process of internationalization in the Brazilian context, there is the Law of Guidelines and Bases of Education (LDB), which in its art. 43, subparagraphs III, IV, V and VI, provides that this can be understood as a mechanism necessary to achieve the purposes established for higher education. It advocates that internationalization is a privileged means of encouraging research and scientific research, with the aim of promoting the development of science and technology, as well as the creation and dissemination of culture, with a view to the benefit of the understanding of man in his habitat Natural; in order to: "promote the dissemination of cultural, scientific and technical knowledge that constitute the patrimony of humanity and communicate knowledge through teaching, publications or other forms of communication"; as well as "raising the permanent desire for cultural and vocational training" and "stimulating awareness of the problems of the present world, in particular national and regional" (Marrara, 2007, p.251).

The Portuguese context establishes quality criteria for the evaluation and accreditation of higher education, including internationalization based on Law 38/2007, supported by Article 161 of the Constitution. The said Law in its Article 4 - Parameters of quality evaluation, in item 1 prescribes the following: (e) International cooperation; in item 2 (b) The completion of study cycles in conjunction with other national and foreign institutions; (j) Integration into national and international projects and partnerships. In its Article 7 regarding the Principles of quality assessment is included in item d as well as in Article 14 Internationalization. This latter article states:

"1 - The external evaluation necessarily includes the participation of experts from foreign or international institutions in the relevant competent panels, in significant numbers.

2 - The Agency may promote the evaluation of educational establishments and study cycles in conjunction with foreign institutions with similar functions, in particular with a view to promoting the comparison of international levels of performance of institutions or courses of study."

It is observed that the process of internationalization runs through several stages that go from the agreements established between countries and regions internally and externally, as well as its planning by the agencies and institutions responsible for its implementation, through a body that represents them, as well as for the development of all legal protection as mentioned above, in the specific case of the two countries Brazil and Portugal, the focus of this research.

Part of this is our interest in studying what institutional actions and policies can be implemented for the purpose of developing and managing research projects, and consequently the generation of scientific products by the directors and coordinators of the Graduate Programs in Librarianship and Information Science and Documentation Brazilian and Portuguese, for the purpose of internationalization and visibility of scientific activities aiming the formation of partnerships at national and international level.

Therefore, considering the relevance of the discussion of this subject for the scientific areas under study, this research aims to know the actions and to analyze to what extent they are promoting internationalization and visibility, starting from the analysis of the perceptions of Brazilian and Portuguese directors and coordinators. And as a research question, we ask: What are the perceptions of the Brazilian and Portuguese coordinators of the Graduate Programs in the area of Library Science and Information Science and Documentation have on the potential of the development of institutional policies and programs for the purposes of internationalization and visibility of scientific activities in these academic spaces?

## METHODOLOGICAL PROCEDURES

For the design of this investigation, according to the question and the objective outlined, we chose to study multiple cases of a qualitative nature, as a research method, just as the content analysis technique was used, since it was searched to understand the contents collected through interviews, in accordance with respondents' responses related to the internationalization and visibility category and the subcategories: publications, projects and research groups (Table 6) (Amado, 2014).

Dimension	Category	Subcategories
		Publications
Lectures / Researchers	Internatioalization and Visibility	National and International research groups
		National and and International research projects

Table 6. Categories and subcategories of analysis.

Source: Research data.

The content analysis was carried out in stages, organized "around three chronological poles" with the appropriate adaptations, based on the proposal of Bardin (2014, p. 121 - 127): pre-analysis, material exploration, categorization (Table 6) and treatment of the results, inference and interpretation from the data of the interviewees collected through semi-directives interviews conducted with coordinators and directors of the Graduate Programs of Sciences of Information and Documentation, selected linked to Public HEIs located in Brazil and Portugal.

For the definition of the locus of this investigation was carried out a survey of the Schools of Librarianship, Documentation and Information Science with Post-Graduation in Brazil on the website of the Brazilian Association of Education in Information Science (ABECIN-<u>http://www.abecin.org.br/abecin\_conteudo.php?id=20</u>). In Portugal, these data were collected using the website of the Portuguese Association of Librarians, Archivists and Documentation (BAD-http://www.apbad.pt/Formacao/formacao\_cdisp.htm).

In order to do so, it was decided to select 15 Post-Graduate Programs in the areas of Library Science and Information Science linked to IES in Brazil and 6 Post-Graduate Programs in the area of Information Sciences and Documentation in Portugal. The choice of these Graduate Programs in the area of Librarianship and Information Science and Documentation, linked to Public HEIs, was due to the fact that they have national recognition for being credited by the National Agencies of postgraduate training in Brazil CAPES (Brazilian Agency for Postgraduate Education /www.capes.gov.br) and in Portugal A3ES (Agency for Evaluation and Accreditation of Higher Education /http://www.a3es.pt/), besides corresponding to the majority of the existing Programs belonging to public universities and for representing Information Science, Documentation and Librarianship in both countries.

Thus, of the selected Programs mentioned above, interviews were conducted with 11 Brazilian and 5 Portuguese coordinators. However, for the design of this communication a full analysis of the speeches emanated by three representatives of the Brazilian context and three of the Portuguese context, referring to the internationalization and visibility category (Table 6) was carried out. It is also emphasized that these interviews with the Brazilian coordinators were carried out from April 2016 to October 2017. With the Portuguese, from November 2016 to June 2017. The time of the interviews with these coordinators and directors took on average 40min to 1h and 20min, recorded with a digital recorder.

It is also worth noting that e-mails were sent and phone calls were made from January 2016 to May 2017 to the said Brazilian and Portuguese directors and coordinators of these researched scientific areas inviting them to participate in this investigation and emphasizing the relevance and contribution study for these areas in the two countries. Thus, those who agreed to participate were previously scheduled and confirmed according to the availability of the interviews in the period referred to above.

The accomplishment of this procedure allowed us a broader understanding of the object under study, as well as the understanding of the multiplicity of generated answers. Thus, it was perceived from the details derived from the speeches emanated by the interviewees, their perceptions about the actions developed with a view to internationalization and visibility of the academic and scientific work, for the purposes of: professional qualification, formation of research groups, implementation and project management, collaborative writing, among others.

For this analysis, Brazilian academic and professional masters and doctorates were selected, linked to Public Institutions of Higher Education, located in the northeast, center-west, south and southeast regions of Brazil. Thus, we avoided privileging the southeastern region of Brazil where the largest number of Brazilian Postgraduate Programs is concentrated, responsible for the training of most of the scientists of this area in Brazil. It is considered that the Brazilian Information Science, as in other countries, breaks with a past of practices that are no longer adequate for the training of professionals, teachers and researchers in the contemporary context, which privileges as responsible for innovations and changes the subject as creator of knowledge, science and technology.

In the selection of Portuguese graduate programs, those who belonged to Public Higher Education Institutions were prioritized, and who implemented the Postgraduate Program in Portugal. As well as those who are accompanying the evolution of this science in that country, adding to the expansion of the scientific production generated, prioritizing the inter and the transdisciplinarity, through the creation of graduate programs in partnerships with Departments of Literature, Engineering, History and Communication. Such partnerships are established with the aim of giving priority to the post-custodial, informational and scientific paradigm "research (to know / interpret), the valorization of information in its informational dynamism as a human and social phenomenon" (Silva & Ribeiro, 2010, p.449).

It should be noted that this research is part of a broader doctoral research already completed. Therefore, in addition to the semi-directives interviews already mentioned with the coordinators and directors of said Programs, a questionnaire survey was applied composed of 40 questions of multiple choices, made available in an online platform, to the teachers and researchers linked to these Programs, population of this study.

## **RESULTS AND DISCUSSIONS**

The results and discussions presented in this section have been organized according to the aforementioned categories and subcategories. Thus, we present and argue the discourses emanating from the protagonist actors in the teaching and research processes, in the Brazilian and Portuguese contexts in the scientific areas already mentioned in the section that presents the methodology used for the development of this investigation.

The protagonists are mostly PhDs and postdocs, have wide experience in the areas of Library Science, Information Science and Documentation in Brazil and Portugal, they continue to develop inter and transdisciplinary projects with several areas of knowledge, such as Communication Sciences, Computer Science, History, Philosophy, Letters, among others. They teach courses, publish, establish research groups in partnership with these areas through the establishment of agreements and agreements with various national and foreign institutions.

According to the excerpts from their speeches listed in figures 1 and 2, the Brazilian interviewees emphasize that the postgraduate courses of the universities of which they are representatives are concerned with establishing partnerships to implement internationalization, following the example of the interviewee A emphasizes that in the Post, which coordinates, has this action as a priority, mainly because it has a grade 6 according to the CAPES, a Brazilian body responsible for accreditation of these courses in Brazil. The referred note is attributed by this institution to the Postgraduate Programs that have International insertion. It also emphasizes that they seek to make institutional policies feasible for the purpose of supporting researchers for the translation of papers for publication in periodicals indexed in international databases.

Another point emphasized by the interviewee A is the establishment of partner networks with foreign universities aimed at internationalization for the purpose of training professionals, establishing partnerships for the development of masters and doctorates, known as MINTER and DINTER. As well as ministering subjects in foreign programs, because it affirms that this action makes it possible to "*take the national bibliography*, ... the thought of how we are understanding the themes here and on the other we learn from them, what they are doing what is new also..."

The interviewee B emphasizes that he also considers it fundamental through the support of institutional policies aimed at internationalization and visibility to stimulate teachers to present papers at international events, as well as to publish articles in foreign language scientific journals, preferably English, since this enables the knowledge "becomes symbolic capital, (thus increasing) the credit of individuals, academic instances and evaluation. That is redefined and articulated to a chain of events: excellence - recognition - visibility - citations - language "(Ortiz, 2008, p.). Only support for the development of these actions by the coordination is "*conceptual*", what they really need is financial support, and this means seeking sponsorship from development agencies, in the case of Brazil CAPES and CNPQ and the Foundations of Research Support located in each region of the country. Without this support there is no way for researchers to achieve this goal.

Interviewee C emphasized another point as actions that implement in his Post is the coming of visiting researchers to the program in order to minister disciplines. According to his perception, the internationalization happens through several routes established through partnerships and agreements with foreign universities, such as: "... creating disciplines, ... bringing the teacher to give discipline, ... having joint projects, then it is not only the visit, it is more than visit, the visit is for you to meet and then develop covenants, then we have several agreements with foreign universities, it happens that the operationalization of the agreement depends on financial resources, so it depends on the agency in Portugal, Spain, England to play the teacher's coming or our going and vice versa, then we only get when you have events, when you enter with research project and managed to bring these teachers. "

Category / Internationalization and Visibility

What are the mechanisms used for internationalization and international

visibility of the developed academic and scientific work?

"Well, first of all, as we have the issue of note 6, we need to worry about internationalization, even because we received that note because of that, so it's our responsibility to maintain internationalization and improve it, we have to keep in mind this responsibility, for that of course, our institutional policy of the program is to motivate and increase our publication outside, so we already have for example a translation policy, and we are supporting the payment so staff can do " (Interviewee A).

"The second issue of internationalization is to create networks with different countries, for example, we here and researchers from Spanish universities, as well as other institutions of preference in America ..."

"... another thing that we also have in mind in terms of internationalization is the training of people from abroad, so we have already had Dinter with Cuba approved and we have now sought to strengthen this type of situation, if not a Dinter, a Minter, to actually go, for example, I have already taught subjects in Colombia, Uruguay, Argentina, so this is very important, you go from here to another country gives a discipline and you then take the national bibliography, you takes the thought of how we are understanding the themes here and on the other we learn from them, what they are doing what is new there too, so it is very important, the production outside, the network of relationships, the exchange, the participation in the formation of outsiders " (Interviewee A).

"So with the support of institutional policies, we seek to publish articles in international journals, we seek cooperation agreements with universities abroad, such as with Spanish, Portuguese and Danish Universities. So these are the forms of internationalization and visibility that we seek. (Interviewee B).

"Proposing the publication of articles in foreign languages, especially in English, or at least the abstract in order to give international visibility, stimulating the teacher to present papers at international events, but it is a stimulus from the conceptual point of view because from the point of view financial view, you do not have the internal support, the program does not have this financial autonomy, so either the teacher goes to the development agencies and gets this support or has no way ... The coming of visiting professor teachers to the program, because hence you establish partnerships, because the issue of internationalization is not only a matter of you giving classes, you have to create disciplines, you have to bring the teacher to give the discipline, you have to have joint projects, so it is not only the visit, is more than visit, the visit is for you to meet and then develop covenants, so we have several agreements with university s foreigners, it happens that the operationalization of the agreement depends on financial resources, it depends on the development agency there in Portugal, Spain, England to pay for the teacher's visit or our trip, and vice versa, so we only get it when you have events , when you enter with research project and managed to bring these teachers ". (Interviewee C).

Figure 1. Analysis category related to internationalization and visibility issues.

#### Source: Research data

In the view of the Portuguese interviewee A, internationalization with the aim of achieving the visibility of the scientific work they develop is effective from a number of initiatives, among them the international campaigns carried out by teachers in several countries, such as Brazil and others countries, mainly aimed at establishing "*some complicity*". We also organize "*colloquiums together*" to discuss good practices, project ideas and research topics, co-orientations, and other activities.

It also emphasizes that the establishment of an "*institutional and personal trust*" enhances working together with the use of technologies. Technological tools facilitate and facilitate the establishment and maintenance of "*communication with colleagues on the international scene, or to develop collaborative work with others at the national level.*" Emphasize thus the "technological support is fundamental". However, I emphasize that in a first instance, "*face-to-face dimension and the institutional and personal trust that is gained in this face-to-face dimension through visits and campaigns conducted outside the country of origin has been fundamental*" (Interviewee A).

As an example, the contacts established with the USP "is something that whenever possible, always desirable ... therefore, a door is opened here, but it is a door also available to other colleagues, it is not a unilateral thing of the sitting with a colleague who comes from Brazil or from other European countries, this has also facilitated knowledge and a very great openness "(Interviewee A).

For the Portuguese interviewed B internationalization and visibility in the Post that coordinates is performed through cooperation with other universities, as well as the Digimedia Research Center (http://digimedia.web.ua.pt/), which brings together researchers from Portuguese and foreign universities coming from several areas of knowledge, such as Communication Sciences, Engineering, History, Philosophy, Computer Science, among others.

Another mechanism used is the establishment of partnership, similar to the post that has coordinates has with the Department of Communication and Art (DECA), IES partner with which to make management together a Postgraduate Program. This partnership established between two Portuguese universities, has as one of the areas of concentration Information Science, has an average of 80% of students coming from Brazil, mainly from the northeast, southeast and south.

It also emphasizes that these Brazilian students, previously, when Portugal did not have post in the area of Information Science, went to Spain to take postgraduate courses. He also emphasizes that as coordinator of this Post, once "a year I travel to Brazil and do the divulgation" emphasizes still "we are already having some doctoral students' sandwiches. Among the regions that most come to the doctorate of Brazil is the northeast, southeast and south. Plus, I think the Northeast takes advantage, Southeast, South, and North (Interviewee B).

The interviewee C points out in relation to the post that coordinates that there is no established institutional policy for the whole program, which for the actions focused on internationalization and visibility "*depends on the attitude of each teacher of the course*", as well as from personal contacts that each component realize. Underline that in their Post, they maintain collaborations with professionals from Mexico, Spain and Brazil. They travel to Portugal "*to teach lectures or short courses within the masters' classes*".

In the view of interviewee C, this is an area they need to invest. He also believes that there is not yet a systematic way among the members of this Post "*a lot of awareness on the part of colleagues ... of the importance of internationalization, of developing projects with other colleagues from other countries, of publishing results.*" Therefore, it believes that it is essential at this moment to work the awareness of the members of this course on the benefits of internationalization.

It is observed through the speeches emanated by the representatives of the Post-Graduation in the Brazilian and Portuguese context that these develop actions for the realization of the internationalization and visibility of the scientific work that they develop. They emphasize in their speeches the contribution of establishing cooperation, agreements and partnerships for the development of projects, collaborative writing for publication purposes, going to foreign universities to teach courses, as well as the arrival of foreign teachers for the same purpose. They believe that it is through these strategies that they achieve prestige and recognition in the scientific and academic global scenary.

#### Portuguese respondents

"I believe that the one that has most influenced are the international campaigns that teachers are doing, that is, there is a moment when we get out, Brazil, and to other countries in Europe, we also do with some complicity, we hold a colloquium together to discuss good practices, project ideas and joint research themes, and even with the complicity of having co-orientations, for example with Brazil, so this in the first instance is fundamental ... "

"... building this institutional and personal trust once again is the ease with which we work with the technologies to establish and maintain communication with colleagues at the international level, to develop collaborative work with others, has been fundamental. But I would point out that in the first instance the face-to-face dimension and the institutional and personal trust that is gained in the face-to-face dimension of the visit and the campaigns we do outside have been fundamental and usually with a contact with other centers, such as the University of São Paulo. whenever it is possible, always desirable therefore, a door is opened here, but it is a door also available to other colleagues, it is not a unilateral thing to sit with a colleague coming from Brazil or from Europe, this has also facilitated the knowledge and a very large gap (Interviewe A) ".

"... through the cooperation that the respective universities and also of the digital CIC that through these two mechanisms, it is the DECA on the one hand and FELUP on the other, before they even created the ICPD already had a cooperation, we also have the Brazil...".

"... in the ICPD the number of Brazilians who have already done this doctorate, this is the result of cooperation with Brazil. It has already reached 80% of Brazilian students, this stems from a policy of visibility and internationalization aimed at Brazil, since Brazilians previously went to Spain to take postgraduate courses in the area of Information Science".

"... In Portugal the first degree in Information Science took place in 2001 and the first master's degree in 2008 and exactly in 2008 begins the first group in ICPD. In 2008, the picture changed we had already done cooperation, however, as director of the ICDP I travel once a year to Brazil and make the disclosure, we are already having some doctoral sandwiches. The regions that most come to the doctorate of Brazil are the northeast, southeast and south. I think northeast takes advantage, from the southeast, south and north "(Interviewee B).

"... there is no orientation for the whole program, it depends on the attitude of each teacher of the course, it depends a lot on the personal contacts that each teacher can take, in the master course we have collaborations with professionals from Mexico, Spain and Brazil, who comes to give lectures or short courses within the master's classes. But this is a personal initiative does not correspond to a general strategy defined, planned and then implemented".

"... it is essentially an area that we need to invest because there is not a lot of awareness on the part of colleagues about the importance of internationalization, the development of projects with other colleagues from other countries, to publish results, we also have to work on this awareness (Interviewee C)

Figure 2. Category of analysis referring to the topics of internationalization and visibility Source: Research data.

In view of the speeches emanating from the Brazilian and Portuguese interviewees, who highlighted the benefits and challenges faced by the implementation of the internationalization actions in the Post that they coordinate, it can be undertaken that this is effective as the fourth mission of the university to the extent that it is capable of to promote, in a purposeful and rational way, the following objectives: "to reinforce joint and integrating projects; give greater scope to their training, research and innovation activities; conducting an agenda of university cultural diplomacy; and contribute to the consolidation of Integrated Knowledge Spaces "(F.S. Santos & Filho, 2012, p.145).

In this sense, it is necessary to highlight the value that should be given to the internationalization of higher education in the contemporary world, which among other things challenges us to become "less provincial, self-centered, dazzled by the brilliance of our local success and more attentive to what the practice that dazzles us - international university collaboration - still provides the means for a new, rich and practically inexhaustible field of opportunity "(FS Santos & Filho, 2012, p.57). The value of this

phenomenon is undeniable for transforming teaching, research, knowledge production and services provided to society through the institutionalization of less hegemonic universities, and more integrated with the prominent social, political, economic and technological factors in the local context, national and global.

For the process of implementing internationalization requires the union of efforts of the interested parties, that is, the development agencies, as well as the institutions that produce knowledge and that generate innovation in science and technology, as well as the actors that represent it. Such efforts enable the resizing of the flow of people and knowledge, enabling them and establishing of the necessary bases for the success of the consolidation of more democratic societies aimed at the institutionalization of common and integrated spaces of knowledge, uniting and approaching continents, for instance, Brazil and Portugal, scenaries of this research that despite the distances have common goals, such as better positions in the national and international rankings, such as those presented in the tables highlighted in the introductory part of this study, the result of a collaborative work, that potentiate the recognition of this effort by providing gains under bilateral agreements between HEIs and development agencies on a global scale.

## CONCLUSION

The present study sought to respond to the objective and outlined question regarding the internationalization actions developed by the directors and coordinators of the areas of Library Science, Information Science and Documentation belonging to Public HEIs in Brazil and Portugal. It is evident from the view of the subjects linked to the selected programs that they develop strategies aimed at the visibility of the scientific work developed as those already mentioned in the presentation section of the results of this communication. However, they emphasize the need for institutional support through existing policies in the Program itself to finance these actions, as well as the financial support of national and international development agencies so that they can present papers in scientific events, publish in foreign journals, and how to teach courses, and bring researchers from foreign universities to their country of origin in order to carry out these actions.

The value given by the representatives of these Postgraduate Programs to the internationalization actions is notable, mainly aiming to reach the visibility of the academic activities and the scientific products generated and developed within these scientific communities. This fact is evidenced by the efforts of these actors to make financial resources viable so that their peers can have their scientific publications published in foreign journals with a high impact factor, as well as through the conclusion of bilateral agreements that allow them to go abroad such as the coming of researchers to the programs they coordinate. This is, in fact, the essence of scientific research within universities that has existed since its inception, which is not limited to generating and innovating teaching and research methodologies, and producing knowledge, but also making science circulate by providing social benefits, cultural, technological, among others that will be in recognition and prestige to the actors responsible for scientific and technological development on a global scale.

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