

# Indexing guidelines for self-archiving policies in institutional repositories in southern and southeastern regions of Brazil

Franciele Marques Redigolo

Fernanda Kelly Menezes Gonçalves

Stela Andrade Vasconcelos

Cecília Abrahão Nascimento de Santi

Mariângela Spotti Lopes Fujita

**Como citar:** REDIGOLO, Franciele Marques; GONÇALVES, Fernanda Kelly Menezes; VASCONCELOS, Stela Andrade; SANTI, Cecília Abrahão Nascimento de; FUJITA, Mariângela Spotti Lopes. Indexing guidelines for self-archiving policies in institutional repositories in southern and southeastern regions of Brazil. *In:* TERRA, Ana Lúcia; FUJITA, Mariângela Spotti Lopes (org.). **Integrating Information Science for Sustainable Development:** Topics and Trends. Marília: Oficina Universitária; São Paulo: Cultura Acadêmica, 2025. p. 523-544. DOI: <https://doi.org/10.36311/2025.978-65-5954-624-4.p523-544>



All the contents of this work, except where otherwise noted, is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 (CC BY-NC-ND 4.0).

Todo o conteúdo deste trabalho, exceto quando houver ressalva, é publicado sob a licença Creative Commons Atribuição-NãoComercial-SemDerivações 4.0 (CC BY-NC-ND 4.0).

Todo el contenido de esta obra, excepto donde se indique lo contrario, está bajo licencia de la licencia Creative Commons Reconocimiento-No comercial-Sin derivados 4.0 (CC BY-NC-ND 4.0).

# Indexing guidelines for self-archiving policies in institutional repositories in southern and southeastern regions of Brazil

*Franciele Marques Redigolo*<sup>1</sup>

*Fernanda Kelly Menezes Gonçalves*<sup>2</sup>

*Stela Andrade Vasconcelos*<sup>3</sup>

*Cecília Abrahão Nascimento de Santi*<sup>4</sup>

*Mariângela Spotti Lopes Fujita*<sup>5</sup>

**ABSTRACT:** Self-archiving policies in institutional repositories aim to ensure that the deposit of files of scientific, administrative, or artistic production is made consistent with the contents, ensuring standardization of the necessary data. This study aims to investigate the use of self-archiving scientific papers in institutional repositories of universities in the Southern and Southeastern regions of Brazil. The study focused especially on the guidelines regarding subject representation while self-archiving for keyword assignment and the use of controlled vocabularies by researchers. The descriptive-exploratory research used a qualitative-quantitative approach to conduct documentary research. From the list of IBICT's Brazilian repositories and the Ministry of Education Portal, a survey was

---

<sup>1</sup> São Paulo State University - UNESP - Marília, Brazil.  
E-mail: [marques.redigolo@unesp.br](mailto:marques.redigolo@unesp.br) | ORCID ID: <https://orcid.org/0000-0001-6277-2960>

<sup>2</sup> Federal University of Pará - UFPA - Belém, Brazil.  
E-mail: [kellyfernanda0215@gmail.com](mailto:kellyfernanda0215@gmail.com) | ORCID ID: <https://orcid.org/0000-0001-6374-8276>

<sup>3</sup> Federal University of Pará - UFPA - Belém, Brazil.  
E-mail: [stelavascncelos@gmail.com](mailto:stelavascncelos@gmail.com) | ORCID ID: <https://orcid.org/0000-0003-1154-3089>

<sup>4</sup> Federal University of Pará - UFPA - Belém, Brazil.  
E-mail: [ceciliabrahao2001@gmail.com](mailto:ceciliabrahao2001@gmail.com) | ORCID ID: <https://orcid.org/0000-0002-8070-2023>

<sup>5</sup> São Paulo State University - UNESP- Marília, Brazil.  
E-mail: [mariangela.fujita@unesp.br](mailto:mariangela.fujita@unesp.br) | ORCID ID: <https://orcid.org/0000-0002-8239-7114>

conducted focused on federal universities of the Southern and Southeastern regions of Brazil. The survey identified repositories that had self-archiving policies and which of them provided guidelines for depositing papers on the platform and used controlled vocabulary to choose the descriptors. The findings showed a total of 27 institutions: 18 have self-archiving policies, among which 07 are repositories in the Southern region and 11 repositories from the Southeastern region. Based on the findings, the study concluded that a significant number of Brazilian institutional repositories had self-archiving policies, however, some repositories still need improvements in the self-archiving guidelines, focusing on information representation and retrieval.

**KEYWORDS:** Self-archiving, Indexing policies, Institutional repositories – Brazil.

## **INTRODUCTION**

Society has evolved in creating and disseminating information, from its origins using drawings and symbols to the modern digital age. This evolution of communication has witnessed several historical events, including the periodical crisis of the 1980s, which significantly altered the methods of storing and disseminating research.

During this period, concerns emerged due to the substantial volume of articles and the delays in their reviews. This situation was exacerbated by the fact that journals, which were then primarily print-based, charged for publications. There was a pronounced discrepancy between the quantity of published material and the needs of the users. Consequently, it became essential to explore solutions to address this issue (Mueller, 2006; Amorim Neto, 2013).

In 1990, the emergence of the ArXiv electronic system marked a pivotal change in the landscape of scientific dissemination. It offered a platform for researchers to submit their preprints to a repository, enabling peers interested in the topic to access them easily. This type of scientific documentation significantly transformed the way of disseminating scientific knowledge and enhanced the autonomy of researchers. The advent of ArXiv also spurred the study of various technological aspects related to scientific communication and information sharing (Mueller, 2006; Oliveira, 2005).

Self-archiving in university Institutional Repositories (IRs) is a reflection of historical events and the evolution of Information and Communication Technologies. These IRs stand out as means of organizing and disseminating research and academic productions, and for this reason, there is a strong incentive for public universities to establish their repositories, promoting self-archiving for the academic community.

However, how do the institutional repositories of federal universities in Brazil guide authors on subject representation for self-archiving? To collaborate in the advancement of discussions on self-archiving in university institutional repositories, this research aims to investigate the use of self-archiving of scientific productions in university IRs at universities in the Southern and Southeastern regions of Brazil, with emphasis on guidelines for researchers on subject representation during self-archiving for assigning keywords and using controlled vocabulary.

## **INDEXING AND INDEXING POLICIES FOR SELF-ARCHIVING**

In response to the challenges that large segments of the population face in accessing scientific information, institutional repositories have emerged as a means to facilitate easier access to academic research. These repositories aim to digitally store and preserve the scientific works of a specific institution, however, the means of disseminating research have undergone a significant evolution until the introduction of this tool.

Driven by the journal crisis due to the high price of subscriptions to scientific journals, the Free Access to Information movement gained encouragement around the world, and in Brazil, it was encouraged by the Brazilian Institute of Information in Science and Technology (IBICT), as reported by Silva (2010).

Based on this, open access institutional repositories managed by university libraries provide support for scientific communication, as it allows researchers to reduce their search time and opens the way for individuals to fully appropriate the desired document. Information users become more dependent, as the act of searching, selecting and retrieving

information in the virtual environment are part of this information behavior (Reis & Zaninelli, 2021).

That said, Institutional Repositories (IRs) are recognized as tools that enhance universities' commitment to promoting research and innovation in Science. The strategies for their creation, dissemination, operation, and maintenance are typically planned by the libraries of these universities.

On the other hand, in addition to the technological aspects that involve the software for implementing the IR, essential policies and elements are also necessary for its maintenance. Leite (2009) states that planning, implementation and community participation are part of the management process and scientific communication. Based on this tripod, managers analyze the software used, the user's informational needs, repository marketing, among other elements that contribute to the development of the tool and the quality of the service.

Costa and Leite (2019, our translation) analyzed IRs in Latin America and found two shortcomings across the systems, "[...] the little formalization of institutional commitment and the low presence of policies." (p.12). This finding highlights the importance of a self-archiving policy for both the IR organization and the quality validation of IRs. In line, Roy et al. (2022) pointed out the deficiency in the implementation of policies within open access repositories, so that students, publishers and the government could collaborate for the success in retrieving newly available content in these repositories.

Thus, when operational, university repositories provide scholars with a valuable reference for their research. Similarly, society at large gains the ability to access these works at any time, as these repositories are a part of the open access movement. Additionally, numerous factors contribute to the quality of the information service provided, which is why managers need to understand the target audience of the repository and implement strategies and policies that enhance the visibility of the tool and instill confidence in its users.

A policy that can contribute to the visibility of the institutional repository and improve the information service provided by the tool is the

self-archiving policy. The practice of self-archiving began with the open access movement, which gave rise to what science considers as *Green Road*. According to Assis (2013, emphasis added) “*Green Road*, or *Via Verde*, which means the self-archiving of scientific production in open access digital repositories.” (p.214). Santos and Oliveira (2019) draw on various investigations to report that the fields of Library Science and Information Science encourage authors to self-archive their works in free communication and dissemination channels, in addition to subscription publishers.

This activity does not replace publication in publishers or printed periodicals but can be considered complementary to them (Swan, 2005). Self-archiving becomes a relevant tool for the scientific community, as it presents another way of making research available and disseminated via the Web. In addition, self-archiving increases the use and impact of scientific productions, thereby increasing access to research and benefiting researchers, users and institutions (Harnad, 2006).

Furthermore, the Brazilian Institute of Information in Science and Technology (IBICT) makes some recommendations for researchers, based on the Berlin Declaration. IBICT (2005) highlights that:

[...] B. It is **essential** that **researchers** (authors):

1. contribute to increasing content in institutional or thematic repositories, depositing as many of their works as possible, whether published or not, including pre-post prints, class material, when applicable and other materials.
2. obligatorily deposit publications involving research results financed with public resources in a free access repository [...]. (p.1, our translation).

Within these recommendations, the importance of research being published by *Green Road* is reinforced, especially research carried out with public resources, just as research at public universities should be freely accessible as “[...] from an ethical point of view, the results of these research should be freely accessible.” (Kuramoto, 2006, p.92, our translation).

It is recognized that institutions should provide support to both librarians and authors to optimize the functioning of repositories. For

librarians, this support involves assistance in developing the indexing policy, while for authors, it pertains to guidance through the self-archiving policy. Such measures aim to enhance the indexing of documents stored in repositories, which, in turn, improves information retrieval (Al-Maskari & Sanderson, 2010), assessed based on factors such as system efficiency, user efficiency, and user characteristics.

Indexing, an ancient practice in Librarianship, consists of representing documents by subject, which can be carried out manually or by automated systems (Lancaster, 2003; Shah, 2015). This activity involves assigning keywords to identify the content of the document, facilitating its retrieval in libraries or databases.

It is therefore understood that the indexing process is an integral part of the thematic treatment of information in libraries, involving key concepts such as exhaustiveness and specificity, which significantly influence the efficiency of information retrieval (Garcia & Redigolo, 2020).

Carneiro (1985, emphasis added) points out three fundamental factors to consider when developing a policy: i. the institution where the indexing will be carried out; ii. the target audience; iii. financial resources. Such aspects will influence policy planning, as they can provide data on users' interests in a given area and the institution's financial costs. Consequently, there will be an efficient and economical indexing policy about the institution's costs and time of user.

The literature also recommends the indexing policy follow the policy of an information retrieval system, as this ends up influencing the indexing process (Rubi & Fujita, 2003). Therefore, the indexing policy must complement the operating policy of institutional repositories that allow self-archiving, for example.

The indexing process involves information organization, treatment and storage, requiring training of the personnel who perform these activities. Tolare and Fujita (2021) argue that, "[...] although the indexing policy establishes guidelines that assist in this process, decision-making involves subjective aspects that permeate life experience, psychological profiles and

mental structures, which are responsible for obtaining a different result in the performance of the function.” (p.21).

Numerous factors guide indexers in making appropriate decisions about the materials they store, both subjective and objective elements, which should be incorporated into the institution’s indexing policy as this inclusion will assist indexers in their work, prompting them to consider the best strategies for the users’ needs.

Tartarotti (2014) emphasizes the importance of discussing skills within a theoretical-methodological context, arguing that this dialogue will optimize the thematic treatment of information. The author also notes that the process of subject indexing and cataloging is influenced by factors such as the indexing policy and the educational background of the indexer as subject analysis is an activity inherently characterized by variations. Furthermore, Narendra (2015) lists the development phases of the librarian as a data analyst, including the ability to collect information, discuss data, analyze activities and visualize studies. Thus, skills revolve around cognitive, interpretative activities that often involve new information and communication technologies.

Indexing is recognized as a longstanding practice among librarians, encompassing the processes of selection, organization, analysis, and storage of information across various document formats. To achieve standardization and quality in information services, a librarian/indexer needs to adhere to an indexing policy, which provides guidelines for coherent and consistent work. Similarly, the self-archiving policy in institutional repositories plays a crucial role. This policy aims to guide researchers on the self-deposit of documents, both the indexing policy and the self-archiving policy are fundamental for ensuring effective and accurate documentary representation.

## **METHODOLOGY**

In order to investigate the use of self-archiving scientific productions in university IRs of universities in the Southern and Southeastern regions

of Brazil, focusing on the guidelines for assigning keywords and use of controlled vocabulary, this research has a exploratory character, and also documentary, as it investigates the self-archiving policies of institutional repositories at federal universities.

Initially, bibliographical research was carried out on the topics studied. Next, a qualitative-quantitative approach was adopted, seeking to quantify the research findings through analysis of 18 self-archiving policies, through categories of analysis.

Firstly, to search the Institutional Repositories of federal universities in the Southern and Southeastern regions of Brazil, the IBICT's List of Brazilian Repositories was used, containing 108 repositories. The study identified 27 institutional repositories from the Southern and Southeastern regions of Brazil (Chart 1), which served as the corpus of this research.

Those Institutional Repositories that met at least one of the conditions were subject to analysis: 1. electronic address in full operation, 2. offered self-archiving, 3. had indexing policies and/or guidelines for depositing authors' intellectual productions. In a second phase, to broaden the scope of the research, the Ministry of Education (MEC) Portal on courses and institutions was also used, as there might be institutions listed on the MEC Portal that were not included in the IBICT's List of Brazilian Repositories. Therefore, five other federal universities and their respective Institutional Repositories in operation were added to analyze the results. It is important to highlight that the Federal University of Santa Catarina (UFSC) has two RIs, RI-UFSC, which is the university's general repository and the Vitor Marinho repository, specific to the Sports Center on the Florianópolis campus. Both were considered eligible for analysis.

However, it is noteworthy that the IRs of the Federal University of Triângulo Mineiro (UFTM), the Federal University of Alfenas (UNIFAL) and the Federal University of São João del-Rei (UFSJ) were not included in the analysis data set, as they are under construction.

It is worth mentioning that the Federal University of ABC (UFABC) was not included in the analysis corpus for two reasons: the Institutional Repository could only be accessed locally, preventing it from being analyzed

remotely, and its other Research Data Repository was not consistent with the research objectives. Furthermore, state and private institutions were disregarded to meet the research objectives.

As a result, 26 Higher Education Institutions (HEIs) were identified with their respective IRs in operation, 11 federal universities in the Southern region and 15 federal universities in the Southeastern region. It is noteworthy that UFSC has 2 repositories, as shown in Table 1.

Table 1: Institutional Repositories from the Southern and Southeastern regions

| Region | Institution                                                    | Repository    | Website                                                                                                                                         |
|--------|----------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| South  | Federal University of Fronteira do Sul (UFFS)                  | RD/UFFS       | <a href="https://rd.uffs.edu.br/">https://rd.uffs.edu.br/</a>                                                                                   |
|        | Federal University of Latin American Integration (UNILA)       | RIUNILA       | <a href="https://portal.unila.edu.br/biblioteca/repositorio-institucional">https://portal.unila.edu.br/biblioteca/repositorio-institucional</a> |
|        | Federal University of Health Sciences of Porto Alegre (UFCSPA) | RI-UFCSPA     | <a href="https://repositorio.ufcspa.edu.br/">https://repositorio.ufcspa.edu.br/</a>                                                             |
|        | Federal University of Pelotas (UFPel)                          | GUAIACA       | <a href="http://guaiaca.ufpel.edu.br/">http://guaiaca.ufpel.edu.br/</a>                                                                         |
|        | Federal University of Santa Catarina (UFSC)                    | RIUFSC        | <a href="http://repositorio.ufsc.br/">http://repositorio.ufsc.br/</a>                                                                           |
|        |                                                                | Vitor Marinho | <a href="https://repositorio.ufsc.br/handle/123456789/127359">https://repositorio.ufsc.br/handle/123456789/127359</a>                           |
|        | Federal University of Santa Maria (UFSM)                       | MANANCIAL/    | <a href="https://repositorio.ufsm.br/">https://repositorio.ufsm.br/</a>                                                                         |
|        | Federal University of Paraná (UFPR)                            | RDI-UFPR      | <a href="https://bibliotecas.ufpr.br/repositorio/">https://bibliotecas.ufpr.br/repositorio/</a>                                                 |
|        | Federal University of Rio Grande (FURG)                        | RI-FURG       | <a href="http://repositorio.furg.br/">http://repositorio.furg.br/</a>                                                                           |
|        | Federal University of Rio Grande do Sul (UFRGS)                | LUME          | <a href="https://lume.ufrgs.br/">https://lume.ufrgs.br/</a>                                                                                     |
|        | Federal Technological University of Paraná (UTFPR)             | RIUT          | <a href="http://repositorio.utfpr.edu.br/jspui/">http://repositorio.utfpr.edu.br/jspui/</a>                                                     |
|        | Federal University of Pampa (UNIPAMPA)                         | RIU           | <a href="https://dspace.unipampa.edu.br/">https://dspace.unipampa.edu.br/</a>                                                                   |

|           |                                                                    |                           |                                                                                                           |
|-----------|--------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------|
| Southeast | Federal University of Itajubá (UNIFEI)                             | RIUNIFEI                  | <a href="https://repositorio.unifei.edu.br/xmlui/">https://repositorio.unifei.edu.br/xmlui/</a>           |
|           | Federal University of Juiz de Fora (UFJF)                          | RI-UFJF                   | <a href="https://repositorio.ufjf.br/jspui/">https://repositorio.ufjf.br/jspui/</a>                       |
|           | Federal University of Lavras (UFLA)                                | RIUFLA                    | <a href="http://repositorio.ufla.br/">http://repositorio.ufla.br/</a>                                     |
|           | Federal University of Minas Gerais (UFMG)                          | RI UFMG                   | <a href="https://repositorio.ufmg.br/">https://repositorio.ufmg.br/</a>                                   |
|           | Federal University of Ouro Preto (UFOP)                            | RIUFOP                    | <a href="http://www.repositorio.ufop.br/">http://www.repositorio.ufop.br/</a>                             |
|           | Federal University of São Carlos (UFSCar)                          | Lisa<br>RI UFSCar         | <a href="https://repositorio.ufscar.br/">https://repositorio.ufscar.br/</a>                               |
|           | Federal University of São Paulo (UNIFESP)                          | RI UNIFESP                | <a href="https://repositorio.unifesp.br/">https://repositorio.unifesp.br/</a>                             |
|           | Federal University of Uberlândia (UFU)                             | RI-UFU                    | <a href="https://repositorio.ufu.br/?locale=pt_BR">https://repositorio.ufu.br/?locale=pt_BR</a>           |
|           | Federal University of Viçosa (UFV)                                 | LOCUS UFV                 | <a href="https://www.locus.ufv.br/handle/123456789/1">https://www.locus.ufv.br/handle/123456789/1</a>     |
|           | Federal University of Espírito Santo (UFES)                        | RIUFES                    | <a href="https://repositorio.ufes.br/home">https://repositorio.ufes.br/home</a>                           |
|           | Federal University of the State of Rio de Janeiro (UNIRIO)         | HÓRUS                     | <a href="https://www.unirio.br/bibliotecacentral/horus">https://www.unirio.br/bibliotecacentral/horus</a> |
|           | Federal University of Rio de Janeiro (UFRJ)                        | PANTHEON                  | <a href="https://pantheon.ufrj.br/">https://pantheon.ufrj.br/</a>                                         |
|           | Federal University of the Jequitinhonha and Mucuri Valleys (UFVJM) | R.I UFVJM                 | <a href="http://acervo.ufvjm.edu.br/jspui/">http://acervo.ufvjm.edu.br/jspui/</a>                         |
|           | Fluminense Federal University (UFF)                                | RIUFF                     | <a href="https://app.uff.br/riuff/">https://app.uff.br/riuff/</a>                                         |
|           | Federal Rural University of Rio de Janeiro (UFRRJ)                 | RIMA                      | <a href="https://rima.ufrj.br/jspui/">https://rima.ufrj.br/jspui/</a>                                     |
|           | Federal University of Triângulo Mineiro (UFTM)                     | <i>Under construction</i> |                                                                                                           |
|           | Federal University of Alfenas (UNIFAL)                             | <i>Under construction</i> |                                                                                                           |
|           | Federal University of São João del-Rei (UFSJ)                      | <i>Under construction</i> |                                                                                                           |

The Institutional Repositories websites were visited in search of files related to self-archiving and guidance for researchers. E-mails were sent to the universities' central libraries for information on the progress and composition of the IRs sites under construction. In response, the Central Library of the Federal University of Triângulo Mineiro informed that the Institutional Repository had not been instructed yet, and the Central Library of the Federal University of Alfenas informed that the repository is still under development and is expected to go into production next year. There was no response to the email sent to the Central Library of the Federal University of São João del-Rei.

The analysis of the Institutional Repositories websites that make up the research sample allowed the identification of 18 self-archiving policies, which were discussed in four categories of analysis. These categories were created based on empirical data collected in this first analysis of Institutional Repositories to search for self-archiving guidelines: 1) Self-archiving function in Institutional Repositories of federal universities; 2) Self-archiving policy, investigating its presence and availability in repositories; 3) Guidelines with print screen images, checking if there are visual guidelines for storage; 4) Keyword assignment and use of controlled vocabulary, analyzing instructions for keyword assignment in policies for self-archiving papers in repositories.

Table 2: Categories of analysis

| Categories                          | Purpose of analysis                                                                                                                                                                                                     |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-archiving function             | Analyze which and how many Institutional Repositories provide the self-archiving function to the user, divided by Southern and Southeastern regions                                                                     |
| Self-archiving policy               | Examines which and how many Institutional Repositories provide access to their Self-archiving Policies, divided by Southern and Southeastern regions, in addition to examining the document's format on the IR website. |
| Guidelines with print screen images | Evaluate policies or other documents that represent them, searching guidelines with prints and guidance for the users on storing papers in the Institutional Repository, divided by Southern and Southeastern regions   |

|                                          |                                                                                                                                                                                                                                            |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Keyword Assignment and Use of Vocabulary | Investigates the content of the guidelines for self-archiving, pointing to the use or not of controlled vocabularies, divided by region and Institutional Repositories. Also, check the guidelines available in IR for assigning keywords. |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Initially, the survey was carried out between June and July, 2020, and was conducted again in July 2022 and October 2023 to verify new data on the Institutional Repositories and their respective self-archiving policies and guidelines, Findings are discussed in the following session.

## RESULTS AND DISCUSSION

To meet the objectives of this research, the analysis of the self-archiving function, the self-archiving policy, guidelines with images and keyword assignment was carried out in the 27 Institutional Repositories, distributed in 12 IRs in the Southern region and 15 in the Southeastern region.

### *Category: Self-archiving function*

In this category, IRs that offer the self-archiving function were found, specifically seven from the Southern region and 11 from the Southeastern region. Furthermore, it was observed that nine IRs did not have the self-archiving function, five from the Southern region and four from the Southeastern region.

This analysis shows that 66.7% of the institutional repositories investigated in this research have the self-archiving option. For Veiga and Macena (2015), institutions must encourage and understand the importance of giving researchers autonomy to archive their research, thus resulting in the prosperity of the self-archiving function.

The following category shows the number of institutional repositories that have a self-archiving policy.

*Category: During the survey of the policy*

In this analysis, it was found that the 18 IRs that have a self-archiving function also have self-archiving policies, seven from the Southern region and 11 from the Southeastern region. This category shows that nine IRs do not have self-archiving policies, five from the Southern region and four from the Southeastern region.

Policies play a fundamental role in the self-archiving process, as they will influence document representation and retrieval. For Carneiro (1985), some points should be considered for efficient policies: 1. identifying the institution to which the indexing system will be linked; 2. identifying the target audience the system is aimed at; 3. financial resources.

During the survey of the policy, it became clear that the self-archiving policy serves as a guideline to ensure the secure deposit of papers. Another point about the policies noted in the universities researched is that some policies are identified with different nomenclatures (ordinance, deposit policy) rather than “Self-archiving policy”. However, regardless of the terminology used, all documents highlight the importance of self-archiving in IRs.

The next category covers institutional repositories that have guidelines for the self-archiving process using prints.

*Category: Guidelines with print screen images*

In this category, we discuss repositories that provide manuals and policies with print screen images of the guidelines for self-archiving. In total, 11 guidelines with images were found, considering the two regions studied.

The Southern region has five institutional repositories that provide guidelines with images. They are: UNILA Institutional Repository, GUAICA Institutional Repository, UFSC Institutional Repository, FURG Institutional Repository, and the UNIPAMPA Institutional Repository.

Using images in guidelines facilitates understanding the self-archiving rules. The practice aims to increase the number of documents in the repository and contributes to open access to scientific information. Assis (2013) states that institutions must offer support and training materials for author-researchers. Therefore, the guidelines with images meet the needs of authors regarding the deposit of papers and seek to ensure greater adherence to the archiving process.

Regarding the retrieved guidelines, UNILA Institutional Repository has a tutorial with self-archiving guidelines for the academic community. GUAIACA/UFPel also has a metadata standardization policy, which guides users on filling out the metadata fields and what relevant information needs to be included on the document at the time of deposit.

UFSC Institutional Repository provides an instruction manual for submitting final course papers. The manual guides the author from logging into the platform to describing the document's data. FURG Institutional Repository does not have guidelines for self-archiving in the repository itself, however, there is a manual for self-archiving in the digital library of theses and dissertations. UNIPAMPA Institutional Repository guides logging into the platform, choosing a collection and filling out the fields using the repository's metadata policy.

The Southeastern region had 06 institutional repositories with guidelines with images: UFLA Institutional Repository, UFMG Institutional Repository, UNIFESP Institutional Repository, UFU Institutional Repository, UFVJM Institutional Repository, UFF Institutional Repository.

UFLA Institutional Repository has an instruction document for using the repository, which reports on the organization of communities and collections, and how the author should perform the submission. UFMG Institutional also has a self-archiving tutorial, which, in addition to guiding submitting academic work, also instructs on how to standardize it according to the institution's guidelines.

UNIFESP Institutional Repository provides several guidelines with images for self-archiving final papers, theses and dissertations, scientific

articles, and a general tutorial for depositing documents. UFU Institutional Repository, in addition to making the self-archiving tutorial available in PDF, organizes a playlist on YouTube with video guidelines in a more dynamic way that facilitates visualization of the submission process.

The UFVJM Institutional Repository also provides a PDF document that not only guides submitting academic work but also provides instructions on filling out the metadata on the platform. UFF Institutional Repository has an instrument identified as a basic tutorial using images to guide self-archiving by authors.

At this moment, with library automation, metadata is part of the indexing and self-archiving process. Thus, repositories that provide policies or tutorials for filling out metadata can ensure that subject representation is carried out by authors with higher quality, and the representation will have more control if it uses controlled vocabulary.

Of the repositories with guidelines on self-archiving, it is noteworthy that only 05 repositories did not have guidelines with images but were guided through written language on the self-deposit of the document or the indication for the author to deliver the document to the library in charge. These specific cases occurred with the following repositories: UTFPR Institutional Repository, UFJF Institutional Repository, UFSCar Institutional Repository, LOCUS UFV Institutional Repository, and UFRJ Pantheon Repository.

Guidelines with images can facilitate self-archiving and ensure that documents are deposited according to the standards of institutional repositories, serving as support material for authors. Furthermore, metadata policies can be a complementary instrument to indexing policies and self-archiving tutorials, as they also aim to standardize and access quality information.

The next category covers guidelines for self-archiving and use of controlled vocabularies.

*Category: Keyword assignment and use of controlled vocabulary*

In this category, the presence of guidelines for assigning keywords and the use of controlled vocabulary was examined in eight repositories in the Southern and Southeastern regions. The guidelines were presented in separate tables (Tables 3 and 4).

The use of controlled vocabulary in the analyzed IRs refers to the act of representing a document appropriately through specific terms, aiming to enable efficient content retrieval by the user.

Table 3: Guidelines for assigning keywords and the use of controlled vocabulary in institutional repositories: Southern region

| Institutional Repository | Guidelines for Assigning Keywords                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Controlled vocabulary                              |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| UNILA RI                 | "Describe the keywords used to describe the theme of the academic work"                                                                                                                                                                                                                                                                                                                                                                                                                | No                                                 |
| GUAICA/ UFPel            | "Each keyword must be registered in a field, starting with the first letter in capital letters; Enter keywords in all languages; When necessary, use general terms, together with specific or related terms, register them in the same field, separating them by a hyphen (e.g.: Philosophy – Study and teaching). Use Pergamum's registry of authorities to adjust keywords, as they need to be controlled; Search the terms in the Pergamum Network Subject Terminology Catalog."    | Yes. Pergamum Network Subject Terminology Catalog. |
| UFSC IR                  | "Inform each keyword of the work individually, in Portuguese, and click on "Add", if there is in another language, include it too, a maximum of 5 (five) keywords for each language."                                                                                                                                                                                                                                                                                                  | No                                                 |
| UNIPAMPA IR              | "Each keyword must be registered in a field, starting with the first letter in capital letters; Enter keywords in all languages; When necessary, use general terms, together with specific or related terms, register them in the same field, separating them with a hyphen (e.g.: Primates – Marmosets). Try to use the keywords used by the authors as long as they are terms preferably registered in the National Library. Search the terms in the BN Subject Terminology Catalog" | Yes. National Library Subject Terminology Catalog. |

Among the 11 institutional repositories in the Southern region of Brazil, four of them provided guidelines for the use of keywords, while two of them also used controlled vocabulary. UNILA IR does not use controlled vocabulary but has a form authors must fill out and submit on the platform. In this form, the guideline is that the author uses the same keywords that appear in the academic work that will be deposited.

Likewise, UFSC IR informs about the addition of keywords on the platform. The repository does not use controlled vocabularies but guides on some points that authors should consider, such as: not using articles and prepositions in keywords, inserting compound words and words with hyphens as one, using the plural and singular in terms, adding keywords in another language, and using a maximum of five keywords. These guidelines are crucial for representing the information contained in the works accurately and faithfully. They also play a significant role in facilitating the retrieval and access of these papers by other users.

GUAICA/UFPeI has a metadata standardization policy for theses, dissertations and scientific articles. The policy guides the use of Pergamum Network terms as they need to be controlled. Still regarding the inclusion of keywords, GUAICA/UFPeI recommends inserting a general term together with a specific or related term, when necessary. Similarly to GUAICA/UFPeI, UNIPAMPA IR also provides a metadata policy and provides the same guidelines on general and specific terms, and insertion in other languages. The difference is that UNIPAMPA IR uses the National Library controlled vocabulary.

Thus, in a study on subject attribution guidelines in theses and dissertations, Fujita and Panuto (2024) observed that keywords are like the identity of a research, they serve as a “map” of the indexed study, hence the importance of guidelines using controlled vocabulary to represent the subject accurately and cohesively.

Table 4: Guidelines for assigning keywords and the use of controlled vocabulary in institutional repositories: Southeastern region

| Institutional Repository | Guidelines for Assigning Keywords                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Controlled Vocabulary |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| UFLA IR                  | “Subject: The terms used as keywords will be used in indexing the document. Therefore, the more faithful the content is, the greater the likelihood that users and readers will find the document in future searches on UFLA IR. Assign the terms necessary to describe your document, being as specific as possible within the scope of the subject. The level of specificity in indexing should align with the content of the text. Use one field per term, to add more fields, click on [...]. Indexing terms should be used in the singular form, except in instances where they cannot be described as such. Capitalize only the initial letter of the term and its specifier. Proper names should adhere to capitalization rules. If specifiers are necessary, their inclusion should be formatted as follows: main subject, space, dash, space, specifier. Avoid using periods.” | No                    |
| UFSCar IR                | “Keywords: Enter the keywords in Portuguese and foreign language. Capitalize only the initial words and acronyms. For each keyword entered, click the Add button. Attention: Enter keywords in all languages in this field. Enter each keyword individually. Do not enter words in sequence, separated by a comma, semicolon or period.”                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | No                    |
| UFU IR                   | “In Keywords, one keyword should be entered per field, as in the example. The words in Portuguese, in the foreign language of the abstract and foreign language abstract and of the catalog card should be included without the word Theses [...]”                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No                    |
| UFVJM IR                 | “Capitalize only the first word of the keyword, according to spelling rules (FIG. 8). Enter each keyword in one field, without period.”                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No                    |

Of the 15 institutional repositories in the Southeast region of Brazil, four IRs presented guidelines for filling in the keywords for self-deposit. However, even though the guidelines served as a guide, none of the four used controlled vocabularies.

UFLA RI guides the use of terms that are faithful to the content, and that are specific to the subject of the work, this way, other users will find it easier to retrieve the work. The repository gives preference to terms in the singular form, except in specific cases. This demonstrates that UFLA

RI has control over subject representation made by authors, aiming at standardizing the digital collection and offering easy access for readers.

UFSCar, UFU and UFVJM Institutional Repositories do not use controlled vocabularies either, but each has its guidelines for the use of keywords. For example, using capital letters only in the first letter of the term, also inserting terms in a foreign language, and inserting each keyword separately, without using commas or semicolons.

Therefore, repositories must provide self-archiving guidelines, as the depositing might be unfamiliar to authors. While indexing is typically performed by librarians, authors assigning terms to their work can align the vocabulary more closely with that of other users, reflecting their realities and their needs (Freitas et al., 2021). Conversely, vocabulary control is necessary for organizing the digital collection and standardizing terms, which can range from general to specific. Through these guidelines, quality information is provided to the user community.

## **FINAL CONSIDERATIONS**

From the above, it is highlighted that self-archiving in University Institutional Repositories is a consequence of historical facts such as the evolution of Information and Communication Technologies. Therefore, its promotion with the use of self-archiving, when operating, provides scholars with an alternative for making their research available and disseminated through Open Access.

In this study, in response to the way the institutional repositories of federal universities in Brazil guide authors on subject representation for self-archiving, an analysis was carried out of the number of federal public universities that have Institutional Repositories, also investigating the indexing policies adopted by these institutions to enable a more accurate self-archiving process.

Aiming at investigating the use of self-archiving scientific productions with guidelines for assigning keywords and the use of controlled vocabularies, the research analyzed 27 institutional repositories.

It was possible to identify that 18 repositories provided the self-archiving function with a self-archiving policy. Regarding the use of print screen images to guide users to self-deposit, 11 institutional repositories used this method. Also, 02 institutional repositories used controlled vocabulary to assist users in subject representation through appropriate terms.

In view of the above, the investigation highlighted a quantitative survey of IRs in the Southern and Southeastern regions of Brazil that have the self-archiving function and their self-archiving policies. From that, it can be concluded that institutional repositories are adhering to the idea of the policies, however, there are still several 09 IRs that can develop and make self-archiving policies available through the creation of a responsible committee.

From this research, more generally, it is understood that providing studies to provide researchers with adequate guidance on keyword assignment and the use of controlled vocabulary when self-archiving their work in IRs is essential. Not only do these practices ensure an accurate and effective representation of their research, but they also facilitate dissemination and access by others in the academic community. Consequently, researchers must adhere to established guidelines to ensure that their work is represented in a manner that enhances its accessibility and maximizes its intended impact.

## REFERENCES

- Al-Maskari, A., & Sanderson, M. (2010). A Review of factors influencing user satisfaction in information retrieval. *Journal of the American Society for Information Science and Technology*, 61(5), 859-868. <https://doi-org.ez3.periodicos.capes.gov.br/10.1002/asi.21300>
- Amorim Neto, M. R. (2013). *Organização do conhecimento na Ciência da Informação: uma análise métrica nos periódicos brasileiros (1972-2012)* [Dissertação de mestrado, Instituto de Artes e Comunicação Social, Universidade Federal Fluminense].
- Assis, T. B. (2013). Análise de políticas de autoarquivamento nos repositórios institucionais brasileiros e portugueses. *InCID: Revista Ciência da Informação e Documentação*, 4(nesp.2), 212-227. <http://www.revistas.usp.br/incid/article/view/69329>

- Carneiro, M. V. (1985). Diretrizes para uma política de indexação. *Revista da Escola de Biblioteconomia da UFMG*, 14(2), 221-241. <http://hdl.handle.net/20.500.11959/brapci/73170>
- Costa, M. P., & Leite, F. C. L. (2019). Open access institutional repositories in Latin America. *Biblios: Journal of Librarianship and Information Science*, 74, 1-14. <https://biblios.pitt.edu/ojs/index.php/biblios/article/view/328/356>
- Freitas, M. P. de, Dal'Evedove, P. R., & Tartarotti, R. C. D. (2021). Políticas de autoarquivamento em repositórios institucionais brasileiros: estudo analítico do metadado assunto. *Páginas a&b: Arquivos e bibliotecas*, (nesp.) 169-175. <https://ojs.letras.up.pt/index.php/paginasieb/article/view/10245>
- Fujita, M. S. L., & Panuto, J. C. (2024). Diretrizes para atribuição de temas de teses e dissertações em repositórios. *Revista IFLA*, 50(1), 160-169. <https://doi-org.ez3.periodicos.capes.gov.br/10.1177/03400352231217275>
- Garcia, V. C., & Redigolo, F. M. (2020). Indexação e recuperação da informação. *Tendências da Pesquisa Brasileira em Ciência da Informação*, 13(1), 1-20. <http://hdl.handle.net/20.500.11959/brapci/159385>
- Harnad, S. (2006). Optimizing OA Self-Archiving Mandates: What? Where? When? Why? How?. *Open Access Archivangelism*. Disponível em: <https://eprints.soton.ac.uk/263098/1/arch.html>. Acesso em: 14 out. 2024.
- Instituto Brasileiro de Informação em Ciência e Tecnologia. (2005). *Manifesto brasileiro de apoio ao acesso livre à informação científica*. IBICT. [livroaberto.ibict.br/Manifesto.pdf](http://livroaberto.ibict.br/Manifesto.pdf)
- Kuramoto, H. (2006). Informação científica: proposta de um novo modelo para o Brasil. *Ciência da Informação*, 35(2), 91-102. <https://doi.org/10.1590/S0100-19652006000200010>
- Lancaster, F. W. (2003). *Indexação e resumos: teoria e prática* (2a ed.). Briquet de Lemos. <https://bibliotextos.files.wordpress.com/2014/07/livro-indexac3a7c3a3o-e-resumos-teoria-e-prc3a1tica-lancaster.pdf>
- Leite, F. C. L. (2009). *Como gerenciar e ampliar a visibilidade da informação científica brasileira: repositórios institucionais de acesso aberto*. Brasília: IBICT. [https://repositorio.unb.br/bitstream/10482/4841/1/LIVRO\\_ComoAmpliarGerenciar.pdf](https://repositorio.unb.br/bitstream/10482/4841/1/LIVRO_ComoAmpliarGerenciar.pdf)
- Mueller, S. P. M. (2006). A comunicação científica e o movimento de acesso livre ao conhecimento. *Ciência da Informação*, 35(2), 27-38. <https://doi.org/10.18225/ci.inf.v35i2.1138>
- Narendra, A. P. (2015). *Big data, data analyst, and improving the competence of librarian*. In: *International Conference on Record and Library: Reinventing Information Professionals*. Surabaya, Indonesia. [http://fv.conference.unair.ac.id/wp-content/uploads/2018/01/Icrl\\_2015.pdf#page=9](http://fv.conference.unair.ac.id/wp-content/uploads/2018/01/Icrl_2015.pdf#page=9)

- Oliveira, E. C. P. (2005). *Grau de adesão à comunicação científica de base eletrônica: estudo do caso da área de Genética* [Tese de doutorado, Escola de Comunicação, Universidade Federal do Rio de Janeiro / IBICT].
- Reis, S. G., & Zaninelli, T. B. (2021). Uma análise em torno do repositório institucional como recurso informacional de acesso aberto. *Ponto de Acesso*, 14(1), 117-137. <https://periodicos.ufba.br/index.php/revistaici/article/view/29094>
- Roy, B. K., Biswas, S. C., & Mukhopadhyay, P. (2022). Archiving policies in institutional digital repositories: a global scenario. *International Journal of Information Science and Management*, 20(2), 102-126. <https://dorl.net/dor/20.1001.1.20088302.2022.20.2.7.2>
- Rubi, M. P., & Fujita, M. S. L. (2003). Elementos de política de indexação em manuais de indexação de sistemas de informação especializados. *Perspectiva em Ciência da Informação*, 8(1), 66-77. <http://hdl.handle.net/20.500.11959/brapci/38387>
- Santos, S. R. O., & Oliveira, D. A. (2019). Autoarquivamento na ciência da informação: uma análise dos documentos depositados no repositório digital e-lis. *Múltiplos Olhares em Ciência da Informação*, 9(2). <http://hdl.handle.net/20.500.11959/brapci/137056>
- Silva, L. H. G. (2010). *As políticas dos repositórios institucionais: conteúdo, acesso, preservação, metadados e submissão/autoarquivamento*. [Trabalho de conclusão de curso, Universidade Federal de Santa Catarina].
- Shah, N. S. (2015). Review of indexing techniques applied in information retrieval. *Pakistan Journal of Engineering, Technology & Science*, 5(1), 27-47. <https://core.ac.uk/download/pdf/268591603.pdf>
- Swan, A. (2005). Open-access self-archiving: an introduction. *Key Perspectives*, Reino Unido (UK). <http://eprints.soton.ac.uk/261006/>
- Tartarotti, R. C. D. (2014). *Atuação bibliotecária no tratamento temático da informação em unidades de informação: estudo comparativo qualitativo*. [Dissertação de mestrado, Universidade Federal de São Carlos].
- Tolare, J. B., & Fujita, M. S. L. (2021). A competência informacional do bibliotecário no processo de indexação. *Revista Brasileira de Biblioteconomia e Documentação*, 17, 1-25. <http://hdl.handle.net/20.500.11959/brapci/162515>
- Veiga, V., & Macena, L. G. (2015). O autoarquivamento nos repositórios institucionais brasileiros: um estudo exploratório. *Ponto de Acesso*, 9(3), 35-47. <https://periodicos.ufba.br/index.php/revistaici/article/view/15107>