















## 4 METHODOLOGY USED

Based on the concepts presented and considering the objective of this study to combine the faceted classification to the archival management for a better information retrieval, one can conceptualize this work as an exploratory research that performs a survey of information about the theme and identifies the factors that determine and contribute to the deepening of knowledge. Because it is a very specific type of research, it almost always takes the form of a case study (GIL, 2008).

For the execution of the work the following steps were followed: 1 - Bibliographic survey; 2 - Identification of the classification plan used in federal universities; 3 - Creation of the structural classification plan; and 4 - Creation of the faceted classification plan in a SIGAD.

The bibliographical survey consisted of a list of bibliographies, whether books, periodicals, theses, dissertations and other bibliographic materials on classification plans, types of arrangements and faceted classification. This stage is a previous selection of bibliographies or documents that can be used as reference in the development of the work.

In this way, researches were carried out in national and international databases in the areas of Library Science and Archivology. The following databases were selected: a) Brazilian Digital Library of Theses and Dissertations (BDTD); b) Digital Journal of Library Science and Information Science (RDBCI); c) Digital Library of Theses and Dissertations of the University of São Paulo; d) Scielo Brasil, an electronic database of scientific data; e) E-prints in Library and Information Science (E-LIS); and f) Google Scholar. The keywords used to search the databases were: faceted classification, classification plan and document management. In this case, these words could be in any field of the record, such as title, abstract and keywords.

In order to have a starting point, it was necessary to identify the classification plan generally used in federal universities. After a search on the internet, the classification plan was identified in the SIGA<sup>1</sup> platform, a repository whose objective is to preserve, store, disseminate and guarantee access to documents, norms and laws related to archival management in Brazil.

The classification plan found was functional and as no structural classification plan

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<sup>1</sup> System of management of archives of the federal public administration. Table of temporality and destination of archive documents related to the final activities of the Federal Institutions of Higher Education – IFES.

Available at

[http://www.siga.arquivonacional.gov.br/images/codigos\\_tabelas/portaria\\_n0922011\\_tabela\\_de\\_temporalidade\\_e\\_destinao.pdf](http://www.siga.arquivonacional.gov.br/images/codigos_tabelas/portaria_n0922011_tabela_de_temporalidade_e_destinao.pdf)>

was located for federal universities, it was assumed that it was necessary to create one to compose the faceted classification plan. The structural type classification represents the various levels of the internal division of an organization such as directories, units and departments in the case of federal universities.

In order to develop the structural classification plan, searches were carried out on the websites of Brazilian universities and federal institutes. With this research, organizational charts were retrieved from the institutions that supported the construction of the structural facet and made possible the understanding of the functioning of the structure of these institutions and their similarities.

After the creation of the structural classification plan and the possession of the functional classification plan used at federal universities, the next step was to join the two plans into a MSSAD to form the faceted classification plan. The chosen SIGAD was a digital repository management system, the Tainacan.

Tainacan is an open source system developed from a partnership between the Ministry of Culture and the Federal University of Goiás, aiming at managing digital documents focused on collaboration, usability and user experience. This system allows the creation of several collections on the same platform and was chosen mainly because it allows the insertion and search from a faceted classification.

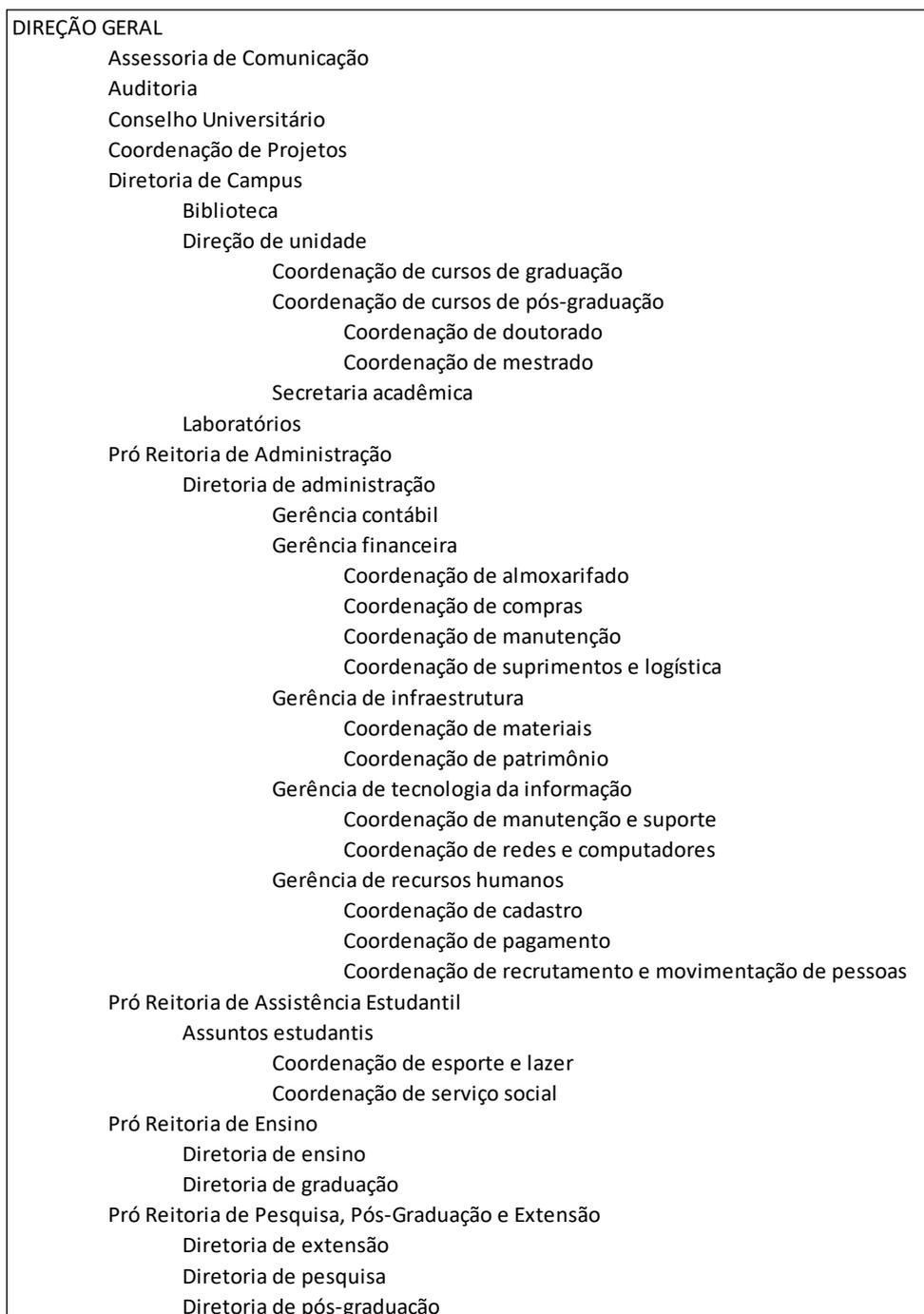
## 5 RESULTS ACHIEVED

The faceted classification plan implemented in the Tainacan system presents the two facets of documentary organization, structural and functional. The structural facet represents the classification plan from the departmental division of the organization, so a document generated from the purchase of materials will be stored in the folder of the purchasing sector, for example. The functional facet provides the documents from their functions, so a registration document will be stored in the students' academic folder, for example.

The functional facet of the classification plan was identified on the SIGA website, which provides the classification plan used in the Federal Institutions of Higher Education. This facet was included in the Tainacan is divided from five major functions: Higher Education; Search; Extension; Basic and Professional Education; and Student Assistance.

The structural facet of the classification plan was developed from organizational charts of some universities and federal institutes. An organization chart is a type of diagram that represents the hierarchical relationships or distribution of the sectors, functional units and positions within an organization. The organization chart represents the distribution of positions and structure of an entity, in that context, were used organizational charts of

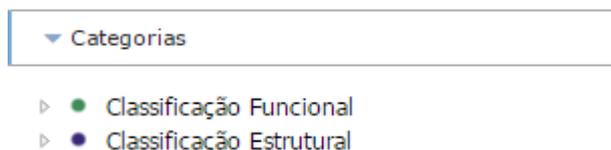
Brazilian universities and federal institutes to compose the structural classification plan, the research to identify the organization charts was carried out on the websites of the following institutions: Federal University of Goiás - UFG; Federal Institute of Baiano - IFbaiano; Federal University of the State of Rio de Janeiro - Unirio; University of the Contestado - UNC; Federal University of Ceará - UFC; and Federal Technological University of Paraná - UTFPR. Image 1 below shows the structural facet developed for the classification plan.



**Image 1.** Structural Classification Plan.

Source: Elaborated by the author.

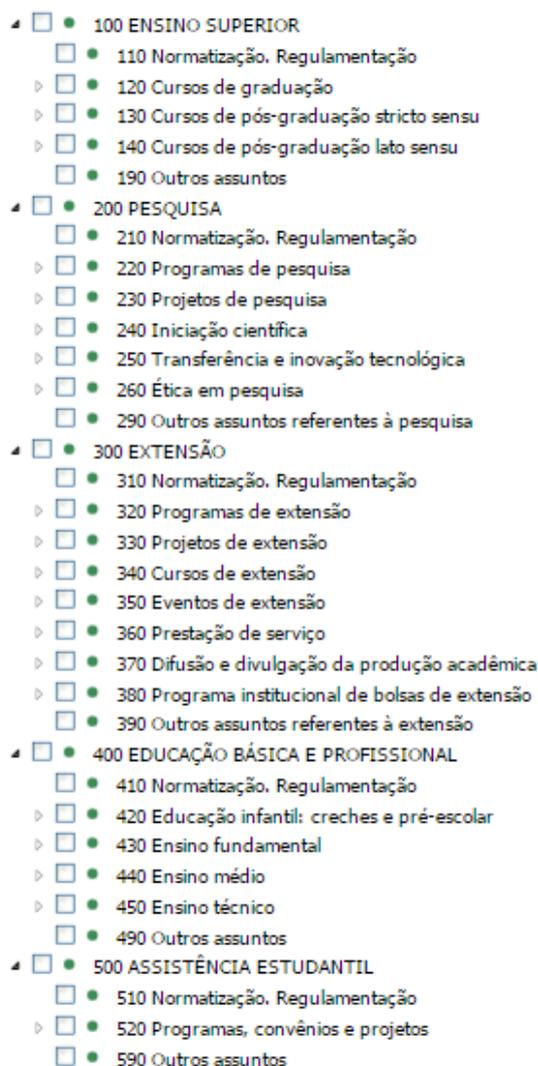
The functional and structural facets were inserted into the Tainacan system as shown in Image 2.



**Image 2.** Facets of the Classification Plan.

Source: Elaborated by the author.

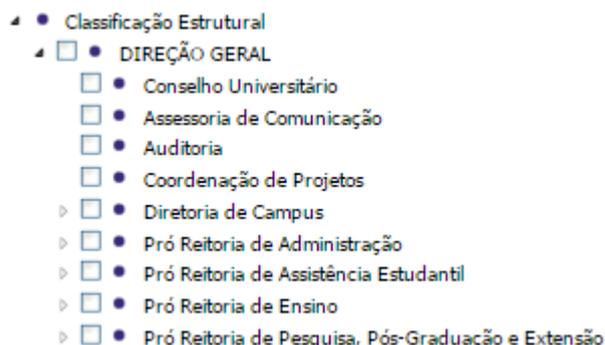
The functional facet inserted contemplates all the functions of the classification plan used in the IFES as shown in Image 3 below.



**Image 3.** Functions of the functional facet

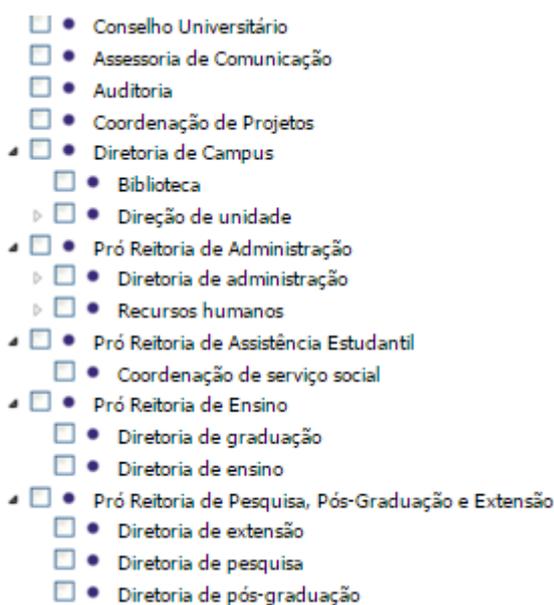
Source: Elaborated by the author.

The structural facet developed from the organizational charts of universities and federal institutes was inserted in Tainacan as shown in Image 4 below.



**Image 4.** Structural facet of the classification plan.  
Source: Elaborated by the author.

Figure 5 below shows the first level of segmentation of these structures.



**Image 5.** Divisions of structural facet.  
Source: Elaborated by the author.

Using the Ranganathan categories, the structural facet of the classification plane represents the space category. This facet comprises the place where an item belongs, the structural type represents the physical organization of the entity reflected in the classification, where the subclasses are arranged as the departments of that entity, representing its geographic organization. It is important to emphasize that this facet does not contain the documentary items, so that there is no redundancy, since these classes already exist in the functional facet from the end-activity classification plan used as the basis. This arrangement also does not interfere in the temporality table, in which the guard periods continue to be

associated with the functional facet classes.

The functional facet represents Ranganathan's personality category. This category is the most difficult to identify, usually defined by the elimination of others, mainly because of the complexity of this category. Personality is seen as what is demonstrated as basic and fundamental to the understanding of a certain subject. According to Grolier (1962), the personality has no theoretical value, it is characterized as an attributed label, indispensable to the existence of things. The function of a document is the essence for its use and recovery in the facet of the functional type, being the essential and relevant characteristic for this classification.

## 6 FINAL THOUGHTS

The objective of this work was to develop a faceted classification plan for archival document management at Brazilian federal universities and to implement it in a SIGAD using Ranganathan's faceted classification theory to assist the user in the search and ensure a better retrieval of information.

The functional facet of the developed classification plan was identified in the system that integrates the documentation and standards related to Brazilian archival management, the SIGA platform of the Ministry of Finance. In the case of the structural facet, it was developed from the organizational charts retrieved on the websites of Brazilian universities and federal institutes. The combination of these two facets gave rise to the faceted classification plan.

The facet classification plan developed for the archival management of documents at federal universities enables the retrieval of information in a more efficient way, in which the user can choose the search strategy, filtering the documents by a functional or structural facet class, or even combining terms from both facets to narrow the search.

From this work we can, in the future, evaluate the users of the Federal University of Goiás the usability of the faceted classification for the search of information and apply this classification plan in other universities to evaluate their suitability in other institutions and verify if this plan may become a model for digital archival management.

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