Brazilian Academic Open Repositories

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Higher education in Brazil had a delayed start in comparison to other South American countries. Peru, for example, had its first university founded in 1551, just 20 years after the starting point of colonization. Brazil, on the other hand, according to the Portuguese politics, preferred that Brazilians studied in Portugal. Only after the arrival of the Portuguese royal family, fleeing the Napoleonic War, the first school of higher education was created, three centuries after the beginning of Portuguese colonization in 1808.

In contrast to the Hispanic countries, Brazilian universities were, since the beginning, secular, while universities in Peru, Colombia and other countries of Spanish colonization, the universities were born under the tutelage of the Church, with the backing of the Spanish Crown. The Royal Academy of Artillery, for example, founded in 1792, now goes by the name of Military Engineering Institute (IME).

Nowadays, even with its late start, Brazil has a prominent position in the South American scene. Even in percentages, Brazil has a smaller quantity of college students. Although, in absolute numbers Brazil surpasses, by far, the other countries of South America, having the better ranked Latin American University in the Times Higher Education rank, The University of São Paulo (USP).

Governed by the Law of Guidelines and National Education Basis (LDB), graduate and higher education, can be taught in public and private institutions, the public being federal, state or local, according to the creation, incorporation, maintenance and administration is the responsibility of the federal government, state or local.

According to the Anisio Teixeira's National Institute of Educational Studies and Research (INEP), responsible for the school Brazilian higher education census, Brazil has 190 universities, the vast majority in the public system, that offer free undergraduate and graduate courses. Therefore, much of the Brazilian researches are developed in universities, within graduate courses.

In this scenario, much of the national scientific production is submitted to institutional repositories. Naturally, as indicates in webometric rank of repositories, the Institutional Repository of the University of São Paulo appears in the privileged position of 19th place, the first in Latin America. Additionally, 47 of the first 100 repositories of Latin American universities placed in this rank are Brazilians.

In this case, Brazilian academic repositories can be organized into two categories: Institutional Repositories (IR) and Repositories of Theses and Dissertations, also known as Digital Library of Theses and Dissertations (BDTD). In some universities there are both IRs and BDTDs. The IRs, are composed mainly of articles, books and book chapters, wider than the BDTDs.

In this study, for organizational reason, IRs are separated from BDTDs. Thus, the methodology used was web data survey, on sites of IRs and BDTDs, in addition to directories and aggregators, thereby collecting data that allows analysis of the Brazilian scenario of academic open access repositories.

Ninety-seven BDTDs were found and 28 IRs, out of a total of 125 open access digital repositories, which had online web sites. Web sites with problems were discarded. It was found that 92% of BDTDs were implemented with the TEDE software, developed and distributed by the Brazilian Institute of Information in Science and Technology (IBICT). As per the IRs, all were implemented using DSpace.

Concerning the amount of documents, BDTDs have 213,682 theses and dissertations, while the IRs have 204,598 digital documents, totaling 418,280 full text open access documents. It should be noted that, BDTDs of this study use the Brazilian Metadata Standard for Theses and Dissertations (MTD-BR) to describe the documents, while the IRs use the Dublin Core (DC).

It is important to stress that both BDTDs as IRs are concentrated mainly in the Southeast and South, due to the number of universities in these regions. The state of Sao Paulo has 21 BDTDs and six RIs, while Roraima, located in the far northern, has only one BDTD. Accordingly, the South and Southeast regions of Brazil have about 57% of repositories and 66% of BDTDs.

The BDTDs are considerably older, starting in 2002, while the IR are much more modern. The Lume IR from the Federal University of Rio Grande do Sul, for example, began in 2008 and has a collection of 64,909 digital documents. The University of Campinas, having the BDTD since 2002, has 13,646 digital theses and dissertations.

In this context, it is verified that Brazil has adopted the policies of open access to scholar information, providing more than 400,000 documents in 125 open access repositories in these last 20 years, interoperable by OAI-PMH, becoming one of the countries with the highest number of repositories and collections available on the Web

Thus, the intense adoption DSpace software is revealed, since all the universities on the present survey are using this tool. This information is a reflection of support actions of IBICT regarding the creation of repositories, which has fostered the use of DSpace, giving technical support to the software users in Brazil.

Likewise, the BDTDs are implemented, in its majority, with the software maintained by IBICT. This software has been widely adopted by institutions that offer masters and doctorate degrees in Brazil. However, there's a general movement towards changing the BDTDs to IRs, resulting in a decline of this kind of digital repository.

Therefore, the amount of open access repositories in Brazil is increasing, and there are several universities in the process of creating its own repositories. The number of open access movement followers is growing amongst Brazilians, due to the adoption of institutional repositories.