Research Data: contribution to the establishment of a digital curation model for Brazil

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Introduction

The research activity, in the context of eScience, uses an extraordinary volume of digital research data. Along with the proliferation of data concern has been raised over how those data collections are to be preserved for future use and reuse. The challenge of digital curation of scientific data lies in the need to preserve not only data collections but also the ability they have to provide knowledge to future users, allowing them to reanalyze the data within new contexts. The management of research data is considered essential to the conduction of scientific research in 21st century, but digital research data can only be managed and preserved along time and space through a sustained institutional commitment. To address this problem, this study presents a multi-faceted analysis of the elements necessary to define a national model of digital curation.

Methodology

This research is theoretical and was inspired by an inductive methodology. It started with a literature survey, which identified the major international reports on the subject. After the analysis of these reports, a specific model of digital research data curation for Brazil was proposed. The reports which were considered the main methodological resource and the examination regarded as fundamental in addressing issues of research data curation were: reports from the National Science Foundation (NSF) [1], Digital Data Curation (DCC) [2] and Organization for Economic Cooperation and Development (OECD) [3,4].

Results and Conclusions

As a result, the study presents an assessment of the following issues: political aspects, required technologies, development of data collections, organizational infrastructure, research on data curation, professional skills, economic sustainability, social, legal and ethical aspects and provisions of services. Figure 1 shows the interrelation of these elements in order to present the various actions involved in the articulation of a national policy on digital curation of research data for Brazil.[5]
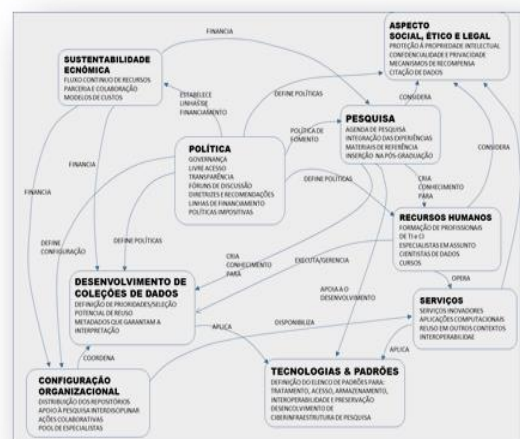

Figure 1: Model of Digital Curation for Research Data

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