ARTICLE

Innovation in university libraries in a period of pandemic in the Northern region of Brazil

Rejane Sales de Lima Paula [1] https://orcid.org/0000-0002-1460-883X

Elaine da Silva [2] https://orcid.org/0000-0003-1449-354X

Luana Maia Woida [3] https://orcid.org/0000-0003-3621-9154

[1] Federal University of Rondônia, Porto Velho, RO, Brazil / e-mail: paula.rejane23@gmail.com
[2] Federal University of São Carlos, São Carlos, SP, Brazil / e-mail: elaine.silva1@unesp.br
[3] Faculdade de Tecnologia de Garça, Garça, SP, Brazil / e-mail: luanamwoida@yahoo.com.br

ABSTRACT

Introduction: The new scenario that we are experiencing has called us to rethink the role of the library as an educational support for the university, because, in a society organized around Digital and Informational and Communication Technologies, it must develop digital services and products to meet the needs of information from the internal and external user community, since the University Libraries (UL) in the connected society are fundamental for the production of scientific knowledge and also to fill the gaps of the subjects in the face of the dissemination of knowledge. This new scenario has forced the closure of libraries in Brazil, especially in the Federal Institutions of Higher Education, however, many of them have been reinventing themselves in offering services and information products online, despite the challenges imposed, they are adapting to the changes that occurred in the overtime. **Method:** This article is a qualitative research of a basic nature using the exploratory and descriptive method, with a bibliographic review on the theme of innovation in university libraries. The research result was collected on the websites of libraries in the northern region of Brazil. The survey of the data allowed a better understanding of the way in which ULs in the region of Brazil are meeting the information needs of their users during the pandemic period of COVID-19. **Conclusion**: Although some of the ULs are not developing actions aimed at training their academic community, there are still those that have been supporting academic activities through innovative attitudes in contemporary society, such as offering information services and products in a diversified way.

KEYWORDS: University libraries. Covid-19 Pandemic. Innovative.

A inovação nas bibliotecas universitárias em tempo de pandemia da região Norte do Brasil

RESUMO

Introdução: O novo cenário que estamos vivenciando tem nos chamado a repensar o papel da biblioteca como suporte educacional à universidade, pois, em uma sociedade organizada em torno das Tecnologias Digitais e Informacionais e Comunicacionais, ela deve desenvolver serviços e produtos digitais para atender as necessidades de informação da comunidade usuária interna e externa, visto que as Bibliotecas Universitárias (BU) na sociedade conectada são fundamentais para a produção do conhecimento científico e também para suprir as lacunas dos sujeitos diante da difusão do conhecimento. Este novo cenário tem obrigado o fechamento das bibliotecas no Brasil, especialmente nas Instituições Federais de Ensino Superior, no entanto, muitas delas vem se reinventando no oferecimento de serviços e produtos informacionais online, apesar dos desafios impostos, elas estão se adequando às mudanças ocorridas no decorrer dos tempos. **Método:** Este artigo trata-se de uma pesquisa

| 1

qualitativa de natureza básica utilizando o método exploratório e descritivo, com revisão bibliográfica referente à temática de inovação nas bibliotecas universitárias. O **resultado** de pesquisa foi coletado nos websites das bibliotecas da região norte do Brasil. O levantamento dos dados permitiu um melhor entendimento da forma como as BU da região do Brasil estão atendendo as necessidades informacionais de seus usuários no período de pandemia da COVID-19. **Conclusão:** Apesar de algumas das BUs não estarem desenvolvendo ações voltadas para a capacitação de sua comunidade acadêmica, ainda há aquelas que vem apoiando as atividades acadêmicas através de atitudes inovadoras na sociedade contemporânea, como a oferta de serviços e produtos informacionais de forma diversificada.

PALAVRAS-CHAVE: Bibliotecas universitárias. Pandemia Covid-19. Ações inovadoras.

JITA: DD. Academic libraries

| 2

1 INTRODUCTION

Currently we are living with the closure of the University Libraries (UL), which are the main information dissemination centers in the Federal Institutions of Higher Education (FIHE), this due to the confrontation with COVID-19 which "[...] is a disease caused by the coronavirus, called SARS-CoV-2, which presents a clinical spectrum ranging from asymptomatic infections to severe conditions" (BRAZIL, 2020, p. 1). In view of this, the World Health Organization (WHO) declared on March 11, 2020 that COVID-19 was considered a pandemic outbreak, and the first outbreaks of the disease occurred in the city of Wuhan, China, in December 2019. Since then, COVID-19 has been ravaging the entire world, especially Brazil, which already has more than 126 thousand deaths[1], and this has imposed social isolation and quarantine on society in general in order to avoid expansion and contagion from person to person, since its transmission occurs through droplets, and most of those infected by COVID-19 from asymptomatic infections to severe conditions.

In Brazil, of the "69 federal universities, 60 suspended face-to-face meetings" due to COVID-19, the Federal Institutions of Higher Education (FIHE) made this decision for the good of the academic community and society in general, but despite the indefinite closure, many teachers and administrative technicians continue to telework so as not to paralyze the university's activities that support teaching, research and extension (JUNQUEIRA; BALDRIGHI, 2020, p. 1). In view of this, Tanus and Tarragó (2020) weave that "universities are not only oriented towards the academic community, but also have the mission of transferring knowledge and services to the whole of society" (TANUS; TARRAGÓ, 2020, p. 4). Therefore, this scenario has encouraged UL to innovate with the provision of services and information products, since they are one of the pillars of higher education serving as support for teaching, research and extension, and therefore are reinventing themselves in the current scenario by offering services and information products such as book loans in the form of delivery, training, workshops, lives of information competence on how to use information sources safely for research, standardization of academic work, scientific writing, among others. For Neves (2018, p. 23), he considers these informational services and products as "learning tools for intellectual enrichment, therefore, it is necessary for the library to have the capacity to innovate". In view of this, it is worth noting that UL are fundamental for the production of scientific knowledge and also to fill the gaps of subjects in the information universe, and that "within universities, libraries are the entities capable of articulating the network of information exchange that will serve members of the university community and external public" (TANUS; TARRAGÓ, 2020, p. 4). However, according to the Brazilian Commission of University Libraries (CBBU) and the Brazilian Federation of Library Associations, Information Scientists and Institutions (FEBAB)[2], some UL "could not keep up with the changes that occurred due to COVID-19, because they had to interrupt all their services, which could generate a great demand for library services in reopening, thus increasing the risk of contagion," such as lending and returning books (CBBU, 2020, p. 1). Based on this reality, the following question arises, why are some ULs as cited by the CBBU (2020) facing so many barriers in the face of the pandemic, if Information and Communication Technologies (ICT) tend to facilitate access to institutional repositories, digital libraries and databases, training, workshops, webinars, among other products and services that can be made available online to the academic community and

| **3**

---

[1] Data collected on September 7, 2020. Available on: https://covid.saude.gov.br/.
[2] Recommendations of the Brazilian Commission of Libraries - CBBU for planning the reopening of university libraries. Available at: http://www.febab.org.br/cbbu/wp-content/uploads/2020/05/Recomenda %C3%A7%C3%B5es-14-de-maio-1.pdf.

society in general? For Santa Anna (2015), "the use of these technologies enables the dissemination of information and the production of knowledge, increasing the capacity of libraries for the democratization of information, breaking down geographical and temporal barriers. This author also defends that the libraries "even passing through challenges and countless changes, these institutions survive thanks to the capacity of adaptation to the constant transformations occurred over time" (SANTA ANNA, 2015, p. 138). In view of this panorama, it is important to emphasize the cultural factors and beliefs existing in university libraries that prevent them from adapting to the new scenario. Although the UL is apparently "homogeneous, the libraries differ, to a greater or lesser extent, precisely in the field of culture" (SANTOS, 2016, p. 90). Thus, it is noticeable that some ULs present distinct postures as stated by the CBBU (2020), and these issues come in contact with organizational culture, since "every organization has its own history and as it is structured, acquires identity, traditions and behavior patterns, starting to outline values" (DUARTE, et al., 2000, p. 2).

For Almeida Júnior (2018, p. 52), culture is defined as, "something that has been historically constructed and always linked to society, to transformations, changes, social changes. And more: it encompasses a society's way of life, values, norms, gestures, behaviors [...]". In this sense, we can see that the technological apparatus will have no effect on university libraries if the technical administrative staff does not replace values, beliefs and cultural rituals inadequate for a new reality, since there are many who have not yet adapted to change, and this has been one of the barriers that libraries have been facing in the period of the pandemic of COVID-19. However, one must also consider the lack of financial resources for not offering informational services and products. However, there are many university libraries that are prepared to provide digital services and products to today's society, since the impact of the UL pandemic on the FIHE has been highlighting the transformations that have come about and that are necessary in this new scenario that has required librarian professionals competent in information to make use of Digital Information and Communication Technologies (TDIC) as a source of information, considering that the UL have a very relevant role in democratization and access to information.

From this, the following question arises: what are the innovative actions of university libraries in the Northern Region of Brazil in a pandemic time? To answer this question, we analyzed the websites of the ULs to identify the innovative actions of digital services and products that are offered to the academic community and society in general.

2 METHODOLOGICAL PROCEDURE

This work is an exploratory-descriptive research of basic nature. The exploratory-descriptive research according to Marconi and Lakatos (2013, p. 71), "are exploratory studies that aim to describe completely a certain phenomenon. As for the relevance of the research being of a basic qualitative nature, it is so called because it produces general knowledge, useful for the advancement of science, without a practical application initially foreseen, involving universal truths and interests, when it "allows to articulate concepts and systematize the production of a certain area of knowledge" (MINAYO, 2002, p. 52). For Marconi and Lakatos (2008, p. 269), "[...] the qualitative method differs from the quantitative method not only by not employing statistical instruments, but also by the way data are collected and analyzed". In view of the above, we have opted in this study to focus on the informational services and products offered by the ULs, thus, the research data will be collected and extracted from the websites of the ULs in northern Brazil (Acre, Amapá, Amazonas, Pará, Rondônia, Roraima and Tocantins).

3 THE LIBRARIAN AND HIS ROLE IN CONTEMPORARY SOCIETY

Today's society has been demanding specialized knowledge from the professional librarian for the use and mastery of information in any format, physical or digital, since they are characterized by the principles of diversity, integration and complexity. In view of this, the librarian professional needs to carry out a continuous search for improvement so that he has "skills to find, evaluate, interpret, create and apply the information available in the generation of new knowledge" and can also act creatively and proactively, among other things in his information units, especially in the context of higher education, in relation to aspects that surround the access and use of information for the formation of subjects in the information society (BELLUZZO; KOBAYASHI; FERES, 2004, p. 95). For Araújo e Dias (2011), the role of the librarian is to play in the educational context the creation of services and products aimed at information management, in order to offer subsidies for the subject to access and obtain information according to his needs, taking into account the ethical use of information in research and scientific productions, because according to Rios (2008, p. 79), that is, "[...] a founding dimension of the good quality work" of these professionals. Through these considerations, we emphasize that librarians in university libraries have the function of mediating information and competence in information. The role of librarians in university libraries is confirmed by Alves, Casarin and Fernandéz-Molina (2016, p. 116), when they argue that:

> University librarians can work with the ethical-legal implications and the fight against plagiarism in the reality of their information units, especially in educational actions that promote the development of Informational Competence and in discussions regarding ethical aspects in scientific production with other sectors of the institution.

| **5**

Thus, the role of the librarian is not only to help the user obtain the desired information, but also to intervene in the formation of the subject by creating means to facilitate the access and use of information in an ethical and responsible manner. For this reason, Freire (2002) points out education as a form of intervention in the world, it is not only for the transmission of knowledge, but also to create possibilities to produce and build knowledge. It is from this perspective, that Alves (2018, p. 16), emphasizes the importance of the development of information competence in the educational context, especially in relation to the aspects that surround the access and use of information for the formation of subjects in the information society. In this line of thought, Coelho Neto (1996, p. 5), highlights that "the role of the librarian in society is changing due to the new information and communication technologies. New ways of working have emerged because new tools have been created for the control, organization and dissemination of information". In this context, it is important to take into consideration Almeida Júnior's speech (2015, p. 25), when he emphasizes that "every action of interference carried out in a process, by an information professional and in the environment of information equipment" aims at strategies to provide information support for education and the formation of the user community and society in general. According to Brito and Vitorino (2017, p. 12), "the way the librarian acts and his profile influences and may determine the success or not of the process of acquisition of knowledge by the mediated, thus contributing to its formation.

In this sense, it is pertinent to emphasize that the librarian [3] is an information professional who must be able to "meet the informational needs of all users, whether from libraries or any documentation center", capable of disseminating, guiding and teaching subjects

---

[3] The librarian's profession is regulated by Law 4.084/62, and by Law 9.674/98, which provides on the exercise of his profession.

how to efficiently and ethically use the information available both on the World Wide Web and among other information supports (SALES, 2004, p. 40). From this perspective, we consider that the role of the librarian in university libraries is to mediate information, be it physical or digital, and to train subjects to deal with information, where the professional librarian "must provide users with up-to-date and quality information" (CORDEIRO; CUNHA; PARGA, 2015, p. 100).

To this end, the librarian in the academic environment aims to develop information competence by "encouraging the development of user autonomy for the acquisition of a series of transversal skills needed to classify and evaluate information and its sources" (AZEVEDO, OGÉCIME, 2020, p. 5). Thus, UL are fundamental for the production of scientific knowledge and also to fill the gaps of the subjects before the information universe, and "within universities, libraries are the entities capable of articulating the network of information exchange that will serve members of the academic community and external public" (TANUS; TARRAGÓ, 2020, p. 4). For this reason, Prado and Cavaglieri (2016, p. 95), weave that library professionals must always reinvent themselves so that they can offer the academic community and society at large in university libraries the use of available sources of information, since, "innovation begins to take place in libraries when they realize that only bibliographic information records will no longer serve a connected, participative society with quick and wide access to a variety of resources.

In view of this, we will talk about the librarian as a mediator of information in university libraries. This subject has been discussed in the area of Information Science and Librarianship with the objective of provoking reflections on the work of this professional, as Gomes states (2014, p. 47), "centrally these studies have been concerned with the conceptual approach, the theoretical foundations, the delineation of the types of mediation, the categories of mediation activities and the mediating role of the information professional. Based on this, the library professional approaches the innovation of information services and products in the UL, and these actions are developed by the librarian to provide the academic community and society in general with access to information during the formative process.

4 INNOVATION IN THE SERVICES AND PRODUCTS OF UNIVERSITY LIBRARIES

Innovation is one of the drivers for competitiveness at FIHE, as a consequence of modernity and the transformations that have occurred in higher education, considering that "technologies are considered necessary to contribute to the process of organization, recovery and transmission of information" (GOMES; DUMONT, 2015, p. 133). In view of this, university libraries need to adapt to the changes caused by these changes, which are intrinsic to higher education, and thus offer services and information products for research, teaching, and extension in order to improve the education of the subject in formation. For Neves (2018, p. 24), "innovation is the primary requirement for the competitiveness and survival of organizations, so that its manifestation is effected mainly through products and services offered. From this perspective, UL are encouraged to innovate in order to offer their users and society in general information services and products online, for this, they must have strategies and focus on the needs of users so that they can innovate and satisfy the academic community with the information from their interest.

According to the Oslo Manual (2005), "innovation can previously occur in any sector of the economy, including public services such as health or education" (OECD, 2005, p. 19). Therefore, for innovations to be engaged in UL, they must first aim at developing their intellectual capital, because internal factors influence innovation, because, as Loures (2006, p.

| 6

38) states, "[...] without innovative subjects, there is no innovation and in this aspect the human dimension is the main factor in the innovative process; innovative subjects are creative, so creativity is a condition for innovation".

The Oslo Manual (2005) also points out that, "trained employees are considered a key resource of an innovative company. Without trained workers the company will not be able to master new technologies and much less innovate" (OECD, 2005, p. 41). For Nascimento, Filho e Barros (2005, p. 6), "the good functioning and success of an information unit will depend on the correct organization of the manager". Neves (2018) highlights that innovation in the context of university libraries should a priori start with the appreciation and development of librarians, since without an innovative team it is not possible to satisfy library users[4].

For Zaninelli, Nogueira and Horimi (2019, p. 232), "the organizational environment has a lot of influence on the type of innovative actions that occur," hence the questioning, UL are innovating with their services and information products? Or are they just offering routine services and products of their activities? In view of this, Zaninelli, Nogueira e Peres (2019, p. 12), affirm that "despite the purpose of the ULs to remain the same over the years, the processes used in offering services and products have changed, since technological changes have caused changes in such units," so we can consider that UL each day is reinventing itself in this new time of pandemic, they are reinventing themselves beyond the walls, seeking to serve users and society in general with virtual training, Webinar, release of access to digital libraries, among others.

According to the Organization for Economic Cooperation and Development (OECD), "innovation is the implementation of a new or improved product (good or service). Or a process. Or a new marketing method. Or a new organizational method in business practices" (OECD, 2005, p. 54-55). Considering this new pandemic scenario of COVID-19, which has been determining the ULs new ways to offer their services and products through TDIC, we have the use of social media, interactive communication channels, Webinars, videoconferences, among other existing tools offering access and dissemination of scientific information. We infer that the services are not only routine, but also a new way to develop through these resources and tools the mediation of information, bringing out the social role of university libraries.

According to Prado and Cavaglieri (2016, p. 95-96), "innovation begins to happen in libraries when they realize that only bibliographic information records will no longer serve a connected, participative society with fast and vast access to a variety of resources. Thus, UL has been committed to improving its informational services and products by making information available through websites, social networks and media, such as Instagram, Twitter, Facebook and other means of communication. These means of communication are great disseminators of information and where several subjects are connected on a daily basis, causing information to circulate at greater speed, since these informational channels allow librarians and users not only to seek interaction, but also to share information. For Zaninelli, Nogueira and Horimi (2019, p. 229):

> Innovation in structure and services is something to think about, because attracting and keeping users in a library is increasingly a challenge. Therefore, for organizations in the service sector - especially libraries - to succeed, it is essential that they consider it: (1) new ways of approaching users and (2) new processes of development and delivery of their services, they should reevaluate their "central/main service", which currently focuses on the supply and availability of information, and therefore be able

| 7

---

[4]   We will not stop to describe about the valorization and development of the librarian in BU, because this is not the focus of this work. To learn more about the subject, we suggest reading the work of NEVES (2018).

to effectively innovate the services currently provided, giving the users who frequent the library spaces the opportunity to choose, so that they can not only meet their information needs, but also be able to look at the library as a space of culture, leisure and entertainment.

In this context, Zaninelli, Nogueira e Peres (2019, p. 13), point out that "ULs should centralize their services on the various profiles of their users, in a manner allied to the university's strategy and short-term trends of the information society. In this regard, taking into account the current epidemic scenario we are experiencing, the ULs have sought ways to make information available by encouraging their actual or potential[5] users to access the services and information products offered. These authors also quote (p. 14) that three libraries in Brazil have managed to innovate their services and products according to the needs of their users, such as the Library of the Federal University of Goiás (UFG), which offers the User Training Program (training of the Capes Portal, training in the use of the library and information sources), The Federal University of Santa Catarina (UFSC) which has the service "Library of Things and Book Crossing , and finally the University of São Paulo (USP) which offers the service "Loan Between Libraries (EEB) and the mobile application SIBiUSP, which allows searching for a book, find the USP library that has it and check its availability" (ZANINELLI; NOGUEIRA; PERES (2019, p. 14-15).

Considering these innovations specified by Zaninelli, Nogueira and Peres (2019), we can state that some of the ULs in the northern region of Brazil have also been innovating with informational services and products offered to the academic community, which will be highlighted in section 5.

5 INNOVATIVE ACTIONS IN THE UNIVERSITY LIBRARIES OF THE NORTH REGION OF BRAZIL

| 8

The North region of Brazil is composed of seven states (Acre, Amapá, Amazonas, Pará, Rondônia, Roraima and Tocantins), the seven states have FIHE that are composed of BU that are "an instance that enables the university to meet the needs of a social group or society in general, through the administration of its information assets and the exercise of an educational function". In view of this, the following will be highlighted: information services and products offered to the academic community and society in general, which according to Almeida et al. (2016, p. 18), these services can be considered innovative, since "[...] the production of something new, of a personal, business or institutional nature, of an objective or subjective, tangible or intangible, measurable or immeasurable nature", and thus, considering the need for university libraries to reinvent themselves in this new pandemic scenario of coronavirus that has been devastating the entire world, libraries are succeeding in developing actions to access information.

The **Federal University of Acre** has 01 Central Library in the Headquarters Campus, 01 Sectorial Library in the Forest Campus and 04 Sectorial Libraries in the Nuclei of the cities of Brasiléia, Feijó, Sena Madureira, Tarauacá and Xapuri (in the implementation phase) and 01 School Library in the Application College, in Rio Branco. In a research at the UFAC[6] Central Library website, it was verified that no action was created to offer services and information

---

[5] Real users are defined as those who use the services, and potential users as the total number of users who can use the information service (DIAS, et al., 2004, p. 7). Available on: https://bibliotextos.files.wordpress.com/2012/12/usos-e-usuc3a1rios-da-informac3a7c3a3o.pdf.
[6] Consultation at http://www2.ufac.br/biblioteca, held on 01/08/2020.

products to the academic community in times of COVID-19 pandemic, such as virtual trainings, Webinar, lectures, workshops, among others. The website also does not contain user service schedules or information about services and products that the academic community can request online or the interruption of books borrowed before the pandemic. We are also unable to see the initial date when UL stopped providing its information services and products to the academic community and society in general. Because we couldn't find information on UL's website about information services to the community in this pandemic scenario, we sent an e-mail on 08/05/2020 asking if it was providing any information service or product to the internal or external community, as well as if they were teleworking, however we didn't get an answer.

The **Federal University of Amapá** has a Library System, totaling 05 units, composed of the Central Library, Binational Library of the Oiapoque Campus, Santana Campus Library, Mazagão Campus Library and a health sector library that is under construction. The UNIFAP Library System website does not contain any actions designed to serve the academic community and society in general in times of COVID-19 pandemic. On the UNIFAP[7] website you will find the necessary information regarding the UL staff, a photo gallery and contact us. We found that the UNIFAP library system only includes routine services and products such as cataloguing, consultation of the collection, home loans through SIGAA. The library's website also contains an agenda for the use of the auditorium, as well as an agenda for requesting training, journals and digital platforms, which consists of the Capes Portal, UNIFAP journals, 1findr and academic Microsoft. We found that the Central Library of UNIFAP has a profile in social networks, and is with current information on Facebook and Instagram, the last post on Twitter was in 2015. We found no information regarding the other libraries of the UNIFAP system on the website. We were able to find on the website and social networks the UL's office hours, telephone and e-mail of the Central Library's board of directors, without information about the other libraries in the campuses belonging to the university. We confirmed that the UNIFAP Library System interacts with the academic community via Facebook and Instagram.

As we could not find any action aimed at the academic community on UL's website, we sent an e-mail to UL of UNIFAP on 08/05/2020 regarding the actions they were developing and we also asked if librarians were teleworking, but we did not get an answer.

The **Federal University of Amazonas** is composed of a Central Library, seven Sector Libraries installed in Manaus and five Libraries in the Units outside the headquarters, inside the State. The seven Sectorial Libraries have their collections computerized and the five Libraries of the Units outside the headquarters have their collections partially computerized. SISTEBIB uses the Pergamum Library Management System (SISTEBIB/UFAM, 2020). SISTEBIB at UFAM has been offering the academic community and society in general several trainings, workshops, Webinars, free access to the Digital Cengage Library and access to Elservier E-books, as highlighted in the News. The official website also features the teaching support tools and information resources (information sources, online catalog, repository, BTDT, UFAM's periodicals portal, Capes' periodicals portal, free access magazine, Brazilian open access scientific publications portal - oasisbr, Capes' thesis and dissertation catalog, among others). Some of the SISTEBIB libraries at UFAM have Facebook and Instagram (social networks) profiles. The attendance and circulation of bibliographic material in SISTEBIB of UFAM are suspended in all libraries, and the returns of bibliographic material must be previously scheduled. On the Library's site are also available all the e-mails of the sectorial libraries, as well as on-line chat channels and e-mail available to the internal and external community in case of doubts or essential information.

| **9**

---

[7] Consultation at https://www2.unifap.br/biblioteca/, held on 01/08/2020.

The **Federal University of Pará** is composed of 36 libraries, namely: 12 of the Institutes, 4 of the Nuclei, 2 of the Graduate Programs, 1 of the Faculty and 6 of the Special Academic Units, and also in the 10 campuses of the municipalities there are the libraries of Abaetetuba, Altamira, Ananindeua, Bragança, Breves, Cametá, Castanhal, Salinópolis, Soure and Tucuruí. Most of them are located on the Belém campus, while the others are distributed on the campuses of other municipalities. The libraries adopt the Pergamum software and their collections are integrated in a unique catalog, available online. SIBI/UFPA[8] provides the academic community and society in general with information services such as the UFPA's online catalog of library holdings; Capes' Periodicals Portal (CAPES); Digital Library of Theses and Dissertations (BDTD); Institutional Repository (RIUFPA); Open Book Portal; Digital Monographs Library; databases of the Brazilian Institute of Information on Science and Technology (IBICT); Virtual Health Library (VHL); and other databases and services and products available on the Internet (SIBI/UFPA, 2020).

The SIBI/UFPA website informs about the opening and closing hours, as well as the list of all university libraries with their respective responsible persons. What draws attention in this website is the list of all UL directors from 1966 to 2016. In addition to these informational resources, the SIBI/UFBA has on its website a link to blogs, YouTube and magazines in the area of Librarianship and Information Science. Another factor that calls attention at SIBI/UFPA is the Contingency Plan - Covid-19, specifying all the rules of care and safety according to the guidelines of health authorities and the recommendations of the UFPA Working Group on New Coronavirus, as well as the procedures for user care that must be scheduled, and also highlights the virtual care via: Facebook, Instagram, WhatsApp and Contact Us. It is also informed in the plan of - Covid-19, that the UL will adopt the social distancing with the following orientations to the users: To limit the number of people inside the BC; To keep alcohol dispenser in gel by the environments of the BC; Obligation of mask use when entering the BC; and still the hygienization of the environments and the collection.

The SIBI/UFPA website is well signaled as to the availability of services and products offered online, such as Catalographic Sheet; Preparation Guide for Academic Papers; CAPES Periodical Portal; Institutional Repository; Digital Library of Monographs; Open Book Portal. There is also a list of trainings, workshops, events and lives that are being held by SIBI/UFPA in online format.

The **Federal University of Rondônia** has 8 libraries in its composition, namely: 1 central library in the city of Porto Velho and 7 sectorial libraries in the following cities: 1 in Cacoal, 1 in Ariquemes, 1 in Guajará-Mirim, 1 in Presidente Médici, 1 in Ji-Paraná, 1 in Vilhena and 1 in Rolim de Moura. The libraries are part of a system. Each UL has its own website and social network (Facebook and Instagram). The UL and its sectors are making available together to the entire academic community and society in general virtual trainings, lectures, lives, webinars, workshops and online events. Thus, SIBI/UNIR[9] offers several services and informational products to support teaching and research, in addition to communication channels on YouTube. SIBI/UNIR is remotely serving the services of Guidance on standards for academic works; Bibliographic survey; Access to databases; Training; Cataloguing Sheet and Statement of Discharge (Nothing On Record) (SIBI/UNIR, 2020).

The **Federal University of Roraima** has three university libraries, the Central Library, the CCA Sectorial Library and the Murupu Campus Sectorial Library. The UFRR[10] UL

| **10**

---

website informs the opening and closing hours, as well as their respective responsible persons and the list of all servers that are full at UL. It is also available the online catalog, digital collection, services and multimedia offered online. With the pandemic, UL began to offer training in database searches, Capes' journal portal and UFRR's digital library via web conference (UL UFRR, 2020).

The **Federal University of Tocantins** comprises the libraries of the campuses of Araguaína, Arraias, Gurupi, Miracema, Palmas, Porto Nacional and Tocantinópolis. In the official website of UL of UFT[11] we were not able to locate any action focused on the academic community. Only informational services and products are specified, such as Computerized Home Loan for students, governors, residents, teachers and regular administrative staff of the institution; Local consultation for registered users and the community in general; Loan between libraries; Search for titles in the computerized and online collection; Online reservation of borrowed bibliographic material; Online loan renewal; Access to Capes journals and other databases; Automatic e-mail sending to users with notices about loans, returns and available reserves; Orientation in the normalization of academic works, according to ABNT; Institutional digital repository of the scientific intellectual production of authors from UFT, including graduation and specialization course conclusion works, master's dissertations and doctorate theses; Bibliographic survey; Catalographic file elaboration; Training of users and programs and awareness for preservation of the collection. Social networks (Facebook, Instagram and Twitter) and communication channels (YouTube) are part of the whole institution (UL UFT, 2020).

6 FINAL CONSIDERATIONS

| **11**

The data survey has allowed a better understanding of how the UL of the Northern region of Brazil are meeting the informational needs of its users during the OVID-19 pandemic period. Although some UL are not developing actions aimed at training their academic community, there are still those that have been supporting academic activities through innovative attitudes in contemporary society, such as offering services and information products in a diversified way (virtual training, lives, webinar, among others). We have noticed that in the UFAC and UFT libraries' websites there are only routine activities signalized, such as: cataloguing request, collection consultation, home loan, research laboratory (virtual research), access to Capes' Portal, access to books and online journals, technical orientation/academic work, bibliographic commutation and user training.

In this context, it is necessary that ULs can use technology as an ally to innovations, so that they can be a strategic factor to improve existing services. Therefore, innovation is one of the key factors to keep university libraries active considering the current scenario, since UL is an information exchange environment and the university's tripod for teaching, research and extension, so it should consider innovation as one of its main foundations for the development of information services and products to be offered to the academic community. We note that there is a challenge when working on innovation in the context of ULs, because often the greatest difficulty is mastering the technologies, and this has pushed away many collaborators who develop work aimed at the academic community user, because they cannot leave aside traditional beliefs to create new habits to improve the informational services and products that ULs offer. Therefore, it is suggested for future work to carry out research on the post-pandemic

---

[11] Consultation of the website http://www.bc.ufrr.br/, held on 05/08/2020.

scenario to verify whether the ULs in the Northern region of Brazil continued with the aforementioned actions available to the academic community and society in general, as well as whether the other ULs that had not been adapted to the context of services adapted to the demands of the pandemic, did so, demonstrating not only adaptation, but also development of a culture of innovation. It is clear that this type of culture is crucial to promoting innovation in the Buses, being responsible for promoting the necessary stimuli for adaptation, creation and change.

REFERENCES

ALMEIDA, A. **Inovação e gestão do conhecimento**. Rio de Janeiro: FGV, 2016.

ALMEIDA JÚNIOR, O. F. **Biblioteconomia e sociedade**.   Brasília, DF: CAPES: UAB; Rio de Janeiro, RJ : Departamento de Biblioteconomia, FACC/UFRJ, 2018. Available on: https://educapes.capes.gov.br/handle/capes/564473?fbclid=IwAR0wDyBT85tJuGKa2ygQ18lDs_XnOu-rQ2CZJ2-rxxalrKBfw7mf0ALfMwE. Access at: 28 jul. 2020.

ALMEIDA JÚNIOR, O. F. de. Mediação da informação: um conceito atualizado. In: BORTOLIN, S.; SANTOS NETO, J. A.; SILVA, R. J. da (org.). **Mediação oral da informação e da leitura**. Londrina: ABECIN, 2015.

ALVES, A. P. M. **Competência informacional e o uso ético da informação na produção científica**. São Paulo: Cultura Acadêmica Digital, 2018.

ALVES, A. P. M.; CASARIN, H. C. S.; FERNANDÉZ-MOLINA, J. Uso ético da informação e combate ao plágio: olhares para as bibliotecas universitárias brasileiras. **Ciência da Informação e Biblioteconomia**: Estudos, João Pessoa, v. 26, n. 1, p.115-130, abr. 2016. Available on: http://www.periodicos.ufpb.br/index.php/ies/article/view/27444&gt. Access at: 6 ago. 2020.

ARAÚJO, E. A.; DIAS, G. A. A atuação do bibliotecário no contexto da sociedade da informação: os novos contextos de informação. *In*: OLIVERIRA, Marlene (org.). **Ciência da Informação e Biblioteconomia**: novos conteúdos e espaços de atuação. 2 ed. Belo Horizonte: Editora UFMG, 2011.

AZEVEDO, K. R. de, OGÉCIME,   M. O papel do bibliotecário como mediador da informação na busca pelo letramento informacional. **RDBCI:** Revista Digital de Biblioteconomia e Ciência da Informação, Campinas, SP. v. 18, 2020. Available on: https://periodicos.sbu.unicamp.br/ojs/index.php/rdbci/article/view/8654473. Access at: 19 jun. 2020

BELLUZZO, R. C. B.; KOBAYASHI, M. do C. M.; FERES, G. G. Competências na era digital: desafios tangíveis para bibliotecários e educadores**. ETD - Educação Temática Digital, Campinas**, SP, v. 6, n.1, p.81-99, dez. 2004. Available on: https://redib.org/Record/oai_articulo1621339-compet%C3%AAncias-na-era-digital-desafios-tang%C3%ADveis-para-bibliotec%C3%A1rios-e-educadores. Acesso: 28 jul. 2020.

| 12

BRASIL. Ministério da Saúde. **Sobre a doença**: o que é covid-19. Brasília: DF, 2020. Available on: https://coronavirus.saude.gov.br/sobre-a-doenca. Access at: 28 jul. 2020.

BRITO, T. R. de.; VITORINO, E. V. O bibliotecário e a mediação da informação no contexto das bibliotecas universitárias. **Páginas arquivo e biblioteca**. S.3, nº 8 (2017) 12-22. Available on: http://ojs.letras.up.pt/index.php/paginasaeb/article/view/3332. Access at: 6 ago. 2020.

COMISSÃO BRASILEIRA DE BIBLIOTECAS UNIVERSITÁRIAS. **Recomendações da Comissão Brasileira de Bibliotecas - CBBU para elaboração de planejamento de reabertura das bibliotecas universitárias**. São Paulo: Boa Vista, 2020. Available on: http://www.febab.org.br/cbbu/wp-content/uploads/2020/05/Recomenda%C3%A7%C3%B5es-14-de-maio-1.pdf. Access at: 28 jul. 2020.

COELHO NETO, J. T. Do paradigma do acervo para o paradigma da informação. In: SIMPÓSIO BRASIL-SUL DE INFORMAÇÃO, 1., 1996, Londrina. **Anais.**.. Londrina: UEL, 1996.

DUARTE, E. N.; AGUIAR, A. C. de; PINHEIRO, E. G.; CARVALHO, L. M.; NOGUEIRA, N. A cultura organizacional influenciando o comportamento do capital humano da biblioteca universitária. **Informação & Sociedade**: Estudos, n. 2, v. 10 n.2 2000, 2000. Available on: https://brapci.inf.br/index.php/res/v/91401. Access at: 29 jul. 2020.

GOMES, H. F. A dimensão dialógica, estética, formativa e ética da mediação da informação. **Informação e Informação**, Londrina, v. 19, n. 2, p. 46 – 59, maio/ago. 2014. Available on: http://www.uel.br/revistas/uel/index.php/informacao/article/view/19994. Access at: 25 ago. 2020.

GOMES, M. A.; DUMONT, L. M. M. Possíveis relações entre o uso de fontes de informação e a competência em informação. **TransInformação**, Campinas, 27(2):133-143, maio/ago., 2015. Available on: https://www.scielo.br/pdf/tinf/v27n2/0103-3786-tinf-27-02-00133.pdf. Access at: 22 out. 2020.

FREIRE, P. **Pedagogia da autonomia**: saberes necessários à prática educativa. São Paulo: Paz e Terra, 2002.

JUNQUEIRA, C.; BALDRIGHI, R. M. ACOVID-19 e alguns retrados da internacionalização do ensino superior. **Le Monde diplomatique Brasil**. Acervo online, Brasil, 9 de maio de 2020. Available on: https://bit.ly/2IMbMhI. Access at: 25 ago. 2020.

LOURES, R. C. R. **Inovação em ambientes organizacionais**: teorias, reflexões e práticas. Curitiba: PR, Ibpex, 2006.

MARCONI, M. A., LAKATOS, E. M. **Metodologia Científica**. 5. ed. São Paulo: Atlas, 2008.

MANESS, J. M. Teoria da biblioteca 2.0: web 2.0 e suas implicações para as bibliotecas. I**nformação e Sociedade**: Estudo, João Pessoa, v. 17, n. 1, p. 43-51, jan./abr. 2007. Available on: https://brapci.inf.br/_repositorio/2010/11/pdf_d1b75c96ad_0012775.pdf. Access at: 5 ago. 2020.

| **13**

MINAYO, M. C. S. **Pesquisa social**: teoria, método e criatividade. Petrópolis: Vozes, 2002.

NASCIMENTO, R. B. do; TROMPIERI FILHO, N.; BARROS, F. G. F. Avaliação da qualidade dos serviços prestados nas unidades de informação universitárias. **Transinformação**, Campinas, v.17, n.3, p.235-251, set./dez., 2005.

NEVES, J. J. F. **A inovação nas bibliotecas universitárias brasileiras**: identificando o potencial inovador. Dissertação (mestrado) - Universidade Federal de Santa Catarina, Centro de Educação, Programa Pós-Graduação em Ciência da Informação, Florianópolis, 2018. Available on: https://repositorio.ufsc.br/handle/123456789/190885. Access at: 5 ago. 2020.

PRADO, J. M. K. dos; CAVAGLIERI, M. A inovação para os bibliotecários de uma instituição de educação profissional: conhecendo o perfil para continuar inovando. **REBECIN**, v.3, n.2, p.93-108, jul./dez. 2016. ISBN 2358-3193. Available on: http://abecin.org.br/portalderevistas/index.php/rebecin. Access at: 12 ago. 2020.

SANTA ANNA, J. O bibliotecário em face das transformações sociais: de guardião a um profissional desinstitucionalizado. **Revista ACB**: Biblioteconomia em Santa Catarina, Florianópolis, v. 20, n. 1, p. 138-157, jan./abr., 2015. Available on: https://revista.acbsc.org.br/racb/article/view/985. Access at: 29 jul. 2020.

SANTOS, C. A cultura organizacional das bibliotecas universitárias brasileiras. **Pesquisa Brasileira em Ciência da Informação e Biblioteconomia**, João Pessoa, v. 11, n. 2, p. 090-098, 2016. Available on: https://brapci.inf.br/index.php/res/download/42658. Access at: 29 jul. 2020.

ORGANIZAÇÃO DE COOPERAÇÃO E DESENVOLVIMENTO ECONÔMICO. Oslo Manual: Guidelines for collecting and interpreting innovation data. 2005. 3. ed. European Comission: OECD/OCDE. Available on: http://www.finep.gov.br/images/a-finep/biblioteca/manual_de_oslo.pdf. Access at: 5 ago. 2020.

SALES, F. de. O ambiente escolar e a atuação bibliotecária: o olhar da educação e o olhar da biblioteconomia. **Encontro Bibli**, Florianópolis, n 18, p.40-57, jul./dez. 2004.

RIOS, T. A. A presença da filosofia e da ética no contexto profissional. **Revista Organicom**, São Paulo, v. 5, n. 8, 2008. Available on: http://www.brapci.inf.br/_repositorio/2010/06/pdf_f564ebbc35_0011137.pdf&gt. Access at: 7 ago. 2020.

TANUS, G. F. S.C; TARRAGÓ, M. Atuação e desafios das bibliotecas universitárias brasileiras durante a pandemia de COVID-19. **Revista Cubana de Información en Ciencias de la, Salud**. Available on: https://preprints.scielo.org/index.php/scielo/preprint/download/744/1007/1050. Access at: 12 ago. 2020.

ZANINELLI, T.; NOGUEIRA, C. A.; HORIMI, D. Inovação em serviços de inovação no contexto da Biblioteca Central da Universidade Estadual de Londrina (UEL): uma análise do ponto de vista dos nativos digitais. **Revista Brasileira de Biblioteconomia e Documentação,**

| **14**

v. 15, n. 1, 2019. ISSN 1980-6949. Available on: https://rbbd.febab.org.br/rbbd/article/view/1197. Access at: 5 ago. 2020.

ZANINELLI, T. B.; NOGUEIRA C. A.; PERES, A. L. M. Biblioteca universitária: uma perspectiva teórica sobre inovações em serviços informacionais. **RDBCI**: Revista Digital Biblioteconomia e Ciência da Informação. ISSN-e 1678-765X, v. 17, 2019. Available on: https://periodicos.sbu.unicamp.br/ojs/index.php/rdbci/article/view/8652821. Access at: 14 ago. 2020.

| 15

| **16**

Article submitted to the similarity system