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Como citar: CAETANO, Alessandra Monteiro Pattuzzo; CASARIN, Helen de Castro Silva. Mapping of good practices in university libraries aligned with the development of digital competence from the perspective of the 2030 agenda. *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. 391-417. DOI:

<https://doi.org/10.36311/2025.978-65-5954-624-4.p391-417>



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Mapping of good practices in university libraries aligned with the development of digital competence from the perspective of the 2030 agenda

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ABSTRACT: The objective was to identify the practices of Brazilian university libraries to achieve the Sustainable Development Goals of the United Nation 2030 Agenda. To conduct the research, an online questionnaire with nine questions was sent to 426 librarians, members of four professional WhatsApp groups. 37 librarians responded to the questionnaire. The results revealed that a parcel of Brazilian university libraries have contributed to achieving sustainable development objectives according to the Agenda 2030. Despite all the Sustainable Development Goals mentioned by the participants, the ones that stand out most are: Ensure inclusive, equitable, and quality education; Achieve gender equality and empower all women and girls; Reduce inequality within and between countries; Ensuring a healthy life and promoting well-being, and Ensuring sustainable production and consumption patterns. Librarians are taking actions to develop digital literacy in their academic community, but they pointed to the necessity of more preparation to exercise your role as an educator using active methodologies and digital educational resources. Few academic libraries offer activities to the external public. The results provide some examples that can inspire librarians in Brazil and beyond.

Keywords: university libraries, Sustainable Development Goals, Agenda 2030

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INTRODUCTION

The discussions on sustainability date back to the beginning of the 2000s, when member countries of the United Nations (UN) prepared a document, entitled “Millennium Development Goals”, to guide international sustainable development actions until 2015. With the assessment of results achieved with the proposition in 2015, the United Nations approved a new document with objectives and targets for the year 2030, aiming to reduce inequalities and the negative impact of man’s actions on the planet. This document was called “Transforming our world: the 2030 Agenda for Sustainable Development”. The document includes 17 Sustainable Development Goals (Figure 1) and 169 targets to achieve them (Ruiz, 2020).

Figure 1 - UN Sustainable Development Goals (SDG)



Source: Sustainable Development Goals, 2022

Aligned with this movement, the International Federation of Library Associations and Institutions (IFLA) prepared the “Lyon Declaration on Access to Information and Development” (2014). This document, signed by Brazil, proposes that “[...] increasing access to information and knowledge across society, assisted by the availability of information and communications technologies (ICTs), supports sustainable development

and improves people's lives." Therefore, the Declaration highlights the role of libraries and other information providers in providing access to information and developing people's digital literacy, contributing to the promotion of sustainable development broadly. Since then, IFLA has been conducting a series of actions (events and publications) to train information professionals and promote the proposal for libraries that effectively contribute to sustainable development.

Brazil's discussions on the topic expanded in 2017, following the Brazilian Congress of Librarianship and Documentation, promoted by the Brazilian Federation of Library Associations, whose theme was "Objectives for the United Nations Sustainable Development: how libraries can contribute to the implementation of the 2030 Agenda" (Federação Brasileira de Associações de Bibliotecários, Cientistas da Informação e Instituições, 2017). This association has carried out several actions to promote the adoption of the 2030 agenda by Brazilian libraries. Therefore, there is a challenge to align the strategic planning of the library and the development of users' digital literacy in connection with the 2030 Agenda.

Considering this scenario, the following questions can be asked: Do Brazilian university libraries develop digital literacy activities from the perspective of the United Nations Agenda 2030? What are the good practices of university libraries that develop digital literacy aligned with the United Nations Agenda 2030? The objective of this study is to identify which practices were developed by Brazilian university libraries to achieve the SDG of the UN 2030 Agenda, seeking to highlight good practices to provide examples that can inspire more librarian professionals in Brazil and beyond.

THE SUSTAINABLE DEVELOPMENT GOALS (SDG) AND THE UNIVERSITY LIBRARIES

The 2030 Agenda is a commitment that involves all institutions, organizations, companies, including libraries, and people. One of the roles of the university library is to improve and facilitate the creation of knowledge in society. According to Rodrigues (2020, p. 101) "libraries

are critical institutions for achieving the Sustainable Development Goals. Public access to information allows people to make informed decisions that can improve their lives.” In other words, social groups and communities that have access to relevant information will be in a better position to “eradicate poverty and inequality, improve agriculture, offer quality education and promote health, culture, research and innovation”.

The International Federation of Library Associations and Institutions (IFLA) advocates that the achievement of sustainable development depends economically, socially and environmentally on access to information. Thus, libraries and other information providers play a key role allowing access to information and promoting the development of digital and information literacy. To expand the application of the SDG by libraries, IFLA, aligned with the UN, created a page entitled Powering Sustainable Development³, which contains a specific area dedicated to showing how libraries can contribute to the SDG. On this page, there are materials and tools to help libraries to support their work, and help them to make a difference in the lives of individuals and communities. The document “Access and Opportunity for all: How libraries contribute to the United Nations 2030 Agenda” (International Federation of Library Associations and Institutions, 2016) there are orientations about how libraries can get involved promoting SDG. Figure 2 contains examples of good practices that libraries can adopt to promote or support SDG:

Figure 2: Examples of the contribution of libraries to achieve the SDG

LIBRARIES CAN DRIVE PROGRESS ACROSS THE ENTIRE UN 2030 AGENDA	
UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS	
END POVERTY IN ALL ITS FORMS EVERYWHERE Libraries support this goal by providing... · Public access to information and resources that give people opportunities to improve their lives. · Training in new skills needed for education and employment. · Information to support decision-making by governments.	END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE Libraries support this goal by providing ... · Agricultural research and data on how to make crops more productive and sustainable. · Public access for farmers to online resources like local market prices, weather reports, and new equipment.

³ <https://www.ifla.org/units/sustainable-development/>

ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES · Libraries support this goal by providing ... Research available in medical and hospital libraries that supports education and improves medical practice for health care providers. · Public access to health and wellness information in public libraries that helps individuals and families stay healthy.	ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL · Libraries support this goal by providing ... Dedicated staff who support early literacy and lifelong learning. · Access to information and research for students everywhere. · Inclusive spaces where cost is not a barrier to new knowledge.
ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS Libraries support this goal by providing ... · Safe and welcoming meeting spaces. · Programmes and services designed to meet the needs of women and girls, like rights and health. · Access to information and ICT that helps women build business skills.	ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL Libraries support these goals by providing... · Access to quality information and good practices that support local water management and sanitation projects. · Free and reliable access to electricity and light to read, study, and work.
BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION Libraries support this goal by providing ... · Widespread existing infrastructure of public and research libraries and skilled library professionals. · Welcoming and inclusive public spaces Access to ICT like high-speed internet that may not be available anywhere else.	REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES Libraries support this goal by providing ... · Neutral and welcoming spaces that make learning accessible to all, including marginalized groups like migrants, refugees, minorities, indigenous peoples, and persons with disabilities. · Equitable access to information that supports social, political, and economic inclusion.

MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE Libraries support this goal by providing ... · Trusted institutions devoted to promoting cultural inclusion and understanding. · Documentation and preservation of cultural heritage for future generations.	ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS Libraries support these goals by providing ... · Sustainable system of sharing and circulating materials that reduces waste. Historical records about coastal change and land use. · Research and data needed to inform climate change policy. · Widespread access to information needed to guide decision-making by local and national governments on topics like hunting, fishing, land use, and water management.
PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS Libraries support this goal by providing ... · Public access to information about government, civil society, and other institutions · Training in the skills needed to understand and use this information.	STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT Libraries support this goal by providing ... · Global network of community-based institutions, primed to support local

Source: International Federation of Library Associations and Institutions, 2016.

Figure 2 clarifies how libraries can become involved and work on the 17 SDG at the same time, developing essential activities to guarantee the exercise of human rights with access to quality information. Furthermore, they can also act in their spaces as privileged actors to raise awareness among their various users about the 2030 Agenda, and to promote the

personal involvement and mobilization of everyone in favor of the SDG. Good practices that may be developed with the academic community, and or, with the external community of higher institutions also contribute to the digital literacy of individuals who participate in the actions, activities and projects offered in this context.

In this sense, the library gains prominence and relevance in its educational role in terms of developing and offering a learning space linked to the process of transforming information into knowledge. A context that brings the challenge for university libraries to align the development of their users' digital literacy with the library's strategic planning in connection with the 2030 Agenda, offering good practices that can be developed with the academic community, and with the external community.

Using examples of good practices associated with the SDG, Rodrigues (2020, p.109) states that implementing the 2030 Agenda in university libraries is a duty of every librarian professional. The first thing we must do is "raise awareness, publicize, and support the initiatives that we know exist in our immediate environment, in the cities where we work, and be creative and create new initiatives that we can share, or in which they can help us help". The author also states the importance of having library staff aware of the 2030 Agenda and the SDG.

Aligned with the objectives of Agenda 2023, academic libraries of private or public institutions need to have sustainable development, and constantly expand their actions in activities that go beyond support education, research and extension, get involved with social, economic, cultural and environmental issues, promoting and providing free cultural actions to information, meeting without distinction to all users. In this way, libraries will be able to support the fulfillment of each of the 17 sustainable development goals, especially when we talk about developing digital literacy.

To understand how Library and Information Science (LIS) literature is discussing the role of university or academic libraries in promoting the 2030 Agenda, it was carried out a literature review about the themes. Meschede and Henkel (2019) mapped publications in LIS until 2018

directly dealing with sustainability and sustainable development. They found that Amanda Spink made the earlier discussion between LIS and sustainability in 1990's. She was the most frequent author between 1990 and 1995, with five articles published. Gobinda Chowdhury is one of the more frequent authors since 2010 and his speciality is: "the carbon footprint of the knowledge sector as well as sustainability of digital libraries and information services and proposes methods to measure environmental costs of digital libraries." (p.1378). Rocha et al. (2019) mapped the Brazilian publications about the actions made by libraries for the promotion of Agenda 2030. As a result, the study found that ODS 4 "Ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all" was most cited in the works analyzed. The kind of libraries that were cited in works analyzed and that are making actions for education and sustainable development are public, school, prison and university libraries. Just some publications related to sustainable development and information literacy and no one with digital literacy.

Yap and Kamilova (2020) present "the value of libraries in integrating SDG's into their work and how it can positively advocate for change toward attaining an inclusive, open and tolerant society." The study gathered opinions from participants of two library programs focusing on gender equality at Nazarbayev University.

The strategic implementation of SDG in the Chinese University of Hong Kong (CUHK) Library was investigated by Ma and Ko (2022). The results indicated that the CUHK Library supports the SDG through the following actions: encouraging healthy lives and wellness (SDG 3: Good Health and Well-being), reading promotion and digital and information literacy (SDG 4: Quality Education), stimulating innovation and creativity (SDG 9: Industry, Innovation and Infrastructure), and providing access to information (SDG 16: Peace, Justice and Strong Institutions). Mathiasson and Jochumsen (2022) conducted a literature review to provide an overview of and insights into a selected bibliography of 102 research publications on libraries, sustainability and sustainable development, including the UN Sustainable Development Goals, with focus on goals about environment

and green libraries. They found that the types of libraries most mentioned in the publications were academic and university libraries. The Dei and Asante's study (2022) explored the role of academic libraries in Ghana in the achievement of quality education as a Sustainable Development Goal. The results established that the majority of library staff were aware of the SDG 4. They concluded by offering a framework to guide the successful accomplishment of this SDG in libraries. Ensslin et al. (2022) reviewed the LIS literature about management of academic libraries from a sustainability perspective. The results showed that the literature about sustainability in library management is presented in a heterogeneous way. Thorpe and Gunton (2022) conducted a case study in the University of Southern Queensland (USQ) Library and identified how the library's services, projects, and action plans were allied to the SDG and how the mapping exercise was communicated to the community.

Inomata, Garcia, and Progene (2023) investigated the scientific production of university libraries and specifically the SDG 5, regarding gender equality. The results indicate that articles addressed the topic of female presence in library management and on the topic of LGBTQIA+ in university library collections; Gender-based violence or equality; Women and science; women's equality. Fedorowicz-Kruszewska's (2023) article highlights that, although the theme of sustainable development has been widely discussed since the 1990s, the body of Library and Information Science (LIS) literature does not reflect the importance of this issue. The issue of the green library is related to the environmental dimension of SDG. For the author, the implementation of the green library concept "[...] contribute to the achievement of selected SDGs and accept the responsibility of educating users about ES, thus increasing their social impact" (p.116). The author discusses the possible reasons for the "still-low interest" of LIS in the issue of green libraries and identifies the barriers in the development of the concept of green libraries in both theoretical and practical dimensions: "The ambiguous definition of a green library, perceived as the main obstacle; A lack of guidelines for green libraries; A lack of evaluation criteria for green libraries; The insufficient promotion of the nature and objectives of environmental education; A lack of well-

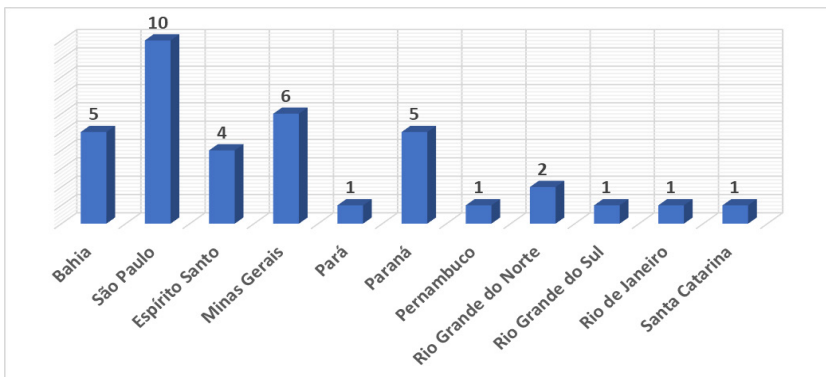
developed tools for monitoring progress towards SDGs in environmental terms at a national level; Limited coverage of environmental sustainability in LIS programmes.” (p.113)

RESEARCH METHODS

To conduct this research, an online questionnaire with nine questions was sent to all members of four WhatsApp groups composed by 426 librarians who work in Brazilian university libraries at public and private institutions located in different regions of the country. These are closed groups managed by a librarian who also works as a researcher or is a professional reference in the area. After three months that the questionnaire was sent, just 37 (8,7%) answered. To ensure anonymity, the names of the participants were replaced with codes L1 to L37.

Regarding the profile of the participants, the first variable verified was the type of institution the participants are affiliated. The results showed that 65% (24) of participants are from public institutions, and 35% (13) from private institutions, that is, the respondents work mainly in government institutions. Graphic 1 shows a distribution of participants by the Brazilian State. Participants were from 11 of the 26 States of Brazil (Graph 1).

Graph 1 - Distribution of research participants by Brazilian State



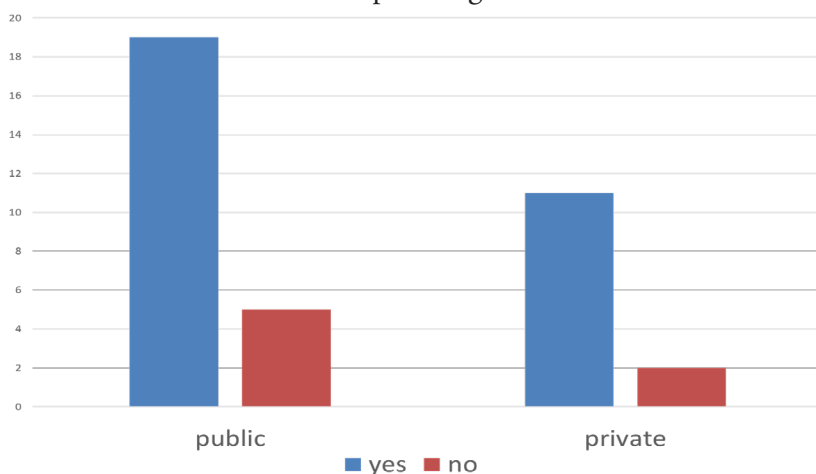
Source: Research data, 2022.

The Brazilian states that the major number of librarians of the study is São Paulo, with 10 participants, followed by other Southeast's States (Minas Gerais, Espírito Santo and Rio de Janeiro) totaling 25 participants. There are eight participants from states of the North East region (Bahia, Rio Grande do Norte e Pernambuco), seven participants from the South region (Paraná, Santa Catarina e Rio Grande do Sul) and just one from North (Pará). The results will be presented in the next session.

PRESENTATION AND ANALYSIS OF RESULTS

The results obtained were included in a spreadsheet and analyzed qualitatively and quantitatively. In the first question we ask whether they use the 17 Sustainable Development Goals of the United Nations (UN) Agenda 2030 as a parameter for planning activities. As Graph 2 shows, public institutions tend to use the SDG for planning their activities more than private ones. Perhaps the reason for that is because the activities of libraries in Brazilian private higher education institutions are more restricted, mainly supporting teaching activities and assisting in the use of documentation standards, as there is rarely research.

Graph 2: The use of the Sustainable Development Goals (SDG) by librarians in planning activities



Source: research data (2022)

Following this, we asked which Sustainable Development Goal of the UN Agenda 2030 they use in library planning activities. In Graphic 3, we noticed that every 17 SDG were mentioned at least twice. The most cited was SDG 4, probably because university libraries are linked to educational institutions, similar to those results founded by Rocha et al. (2019) and Dei and Asante (2022). The SDG last indicated were: SDG 2 - Zero hunger; SDG 7 – Affordable and clean energy; SDG 14 – Life below water and SDG 15 – Life on Land, probably because these topics are not related to the core activities of libraries, although the theme of green and sustainable libraries are already on the agenda of libraries, as the theme of this event, for example. Just one librarian cited that he/she uses all 17 SDG for planning their activities.

Graphic 3: Sustainable Development Goal used by Brazilian librarians for planning their activities



Source: research data, 2022

In the next question we ask them to specify which activities they develop for which SDG. Just one participant (L3) specified the activities she/he developed. The answers are in Table 1:

Table 1: Activities developed by one Brazilian academic library and the SDGs

SDG	Actions and activities of libraries related to which SDG
1 NO POVERTY 	Courses and workshops, and organization of bazaars and actions meet this objective.
2 ZERO HUNGER 	The library has a collection about the SDGs and has access to scientific information through Capes Databases.⁴ Develops food collection campaigns, such as the “Solidary Negotiation” campaign.
3 GOOD HEALTH AND WELL-BEING 	Provides Podcasts on the topic of mental health and well-being.
4 QUALITY EDUCATION 	Offering services to encourage reading such as the “Library Passport”, the “Care For Me” Project, Storytelling, the “Forget a Book” project. My institution has a school library and a public library in partnership with Lions Club International.
5 GENDER EQUALITY 	Tribute paid to the first librarian and first director by naming the Central Library after her contributed to the empowerment of women and in this case a black woman. Offer of a “Care Course” which services were addressed to the LGBTQIA+ community, showing a concern for gender identity. Deer availability on women and feminism.

⁴ That is a Portal for scientific databases maintained by the Brazilian Federal Government. For more information access: www.periodicoscapes.gov.br.

6 CLEAN WATER AND SANITATION 	Provides collections on the topic and databases through the CAPES Portal.
7 AFFORDABLE AND CLEAN ENERGY 	Provides collections on the topic and databases through the CAPES Portal.
8 DECENT WORK AND ECONOMIC GROWTH 	In addition to its collection and access to databases, it offers training courses and workshops, such as: Library organization, Library assistant, Citizen service, Document management, Bibliographic standardization. Contributing to training and preparing for the job market. (L.3)
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	It has a collection on innovation, seeking to integrate information and communication technologies (ICT) into all activities, products and services offered.
10 REDUCED INEQUALITIES 	It is concerned with access to information, digital inclusion, spaces accessible to wheelchair users, Braille and digital collections. There is the booklet Equals in the world of differences: attitudinal accessibility.
11 SUSTAINABLE CITIES AND COMMUNITIES 	It works, encourages and disseminates culture and cultural heritage since its creation, through cultural and extension activities.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	It develops several actions related to this theme, reusing paper, printer coils, and adopting glass cups for drinking water and coffee.
13 CLIMATE ACTION 	It seeks a conscious use of light and water, and is concerned with creating and maintaining green areas around its libraries.
14 LIFE BELOW WATER 	Sended data to ASFA Database - Aquatic Sciences and Fisheries Abstracts - A database on the science, technology, management and conservation of saltwater and freshwater marine resources and environmental resources.
15 LIFE ON LAND 	It contributes to this objective through its collection, its databases and its Podcast "Speakup Julieta!"
16 PEACE, JUSTICE AND STRONG INSTITUTIONS 	Through its campaigns, it seeks responsibility in a more inclusive society. Campaigns such as: Pink October, Blue November.
17 PARTNERSHIPS FOR THE GOALS 	Aims at sustainable development, creates actions that enable the sustainability of the library, such as the Campaign to negotiate sanctions regarding the delay of books, where the penalty for delay is reversed by the exchange for a book to form the literary collection of one of the libraries in the System.

Source: Research Data, 2022

It was asked if they offer activities / actions / projects for the development of the digital literacy of users. 31 of the 37 participants answered that they offer activities to develop the digital literacy of users and six answered that they don't offer this kind of activity.

Following, we asked librarians to describe the activities/actions or projects they offer to develop the user's digital literacy. Twenty-eight subjects answered this question, and six didn't answer. Three subjects simply informed that "Does not carry out any type of activity that develops digital competence" and one participant justified why they don't do these activities: "I do not develop it, as the undergraduate school already works on this topic in the classroom and in university extension." The answers are in Table 2.

Table 2: Activities/actions or projects offered by Brazilian libraries to develop the user's digital literacy and target audience

Activities/actions or projects	faculties	students	external public	University staff
1. Training for use of new technologies (L.1).	x	x		
2. Training for access to the Database of CAPES Portal and the library system called Pergamum (L.3).	x	x		
3. Training for search in scientific databases (L.4).	x	x		
4. Training for use of information sources for research (L.5).	x	x	x	
5. Training for use of the platform of ebooks and Book club online (L.7).	x	x		
6. Instruction about the use of professional e-mail; Training for use of G Suit (google) resources; Training for access to and use databases and digital libraries; configuration of cell phones and notebooks to access the Wi-Fi network; use of text editor resources; offering a computer for internet access and writing academic work, etc. (L.8)	x	x		

Activities/actions or projects	faculties	students	external public	University staff
7. Presentation of library and training of library system (L.9).		x		
8. Training in the use of the Capes Periodicals database and virtual databases in the area of Health; CV filling workshops on the Lattes platform ⁵ ; Free course on internet research strategies; Free course in Preparing academic works and scientific writing; Workshops on using Word. (L.10).	x	x		
9. Training for search in scientific databases and for consulting the library's webpage (L.12);		x		
10. Orientation for search in scientific databases (L.13);		x		
11. Dissemination through media (social networks) of library products, such as reading tips, new acquisitions on digital platforms (L.14).	x	x		
12. Library as a digital empowerment center (for all ages), access to free online technology courses and 2 - Events for female empowerment, lectures and cultural actions (L.15).	x	x	x	x
13. STARTECA extension project (pre-startup + library), a space for entrepreneurship, which comprises an active role of the university library in the context of the entrepreneurial university, supporting and acting in the development of technology-based ventures, through the development of skills in intellectual property in search of precedents, business plans, technological prospecting, using specialized computational tools in metric studies of patent documents and scientific articles indexed in scientific and/or technological databases (L.16).	x	x		

⁵ A Federal government platform for CV of researcher register

Activities/actions or projects	faculties	students	external public	University staff
14. Through library projects to encourage academic publishing, developing autonomous digital skills so that the user is empowered in the use of tools (L.17).		x		
15. Training users to make the best use of the Library and its information resources in physical and digital media. Short courses and lectures in the areas of Management and media information skills, among other initiatives and actions (L.19).	x	x		x
16. Events, lectures, exhibitions, lives, training (L.21)	x	x	x	x
17. We offer training for guidance and answering questions about the use of databases, use of bibliographic management software, among others (L.22).	x	x		
18. Workshops for academic research, workshops on the use and demonstration of virtual library resources, lectures on the standardization of academic research (L.24);	x	x		
19. Social Action Projects - Project People reading Generates people Reading (book donation), Project Throwing for the Future with They (action to support girls from an non-governmental organization close to the college), Solidarity Hazing Projects (L.24).			x	
20. Training in various research tools and platforms for researchers, and in Wikimedia projects, as an extension to teaching and research (L.26).	x	x		
21. Training to combat Fake News (L.27).		x		
22. Tool training, discussions, sharing on social media (L.29).	x	x	x	
23. Development of a search strategy using connectors, Boolean operators, wildcards to improve searches (L.31).	x	x		

Activities/actions or projects	faculties	students	external public	University staff
24. Traveling library, assistance with research in activities at the Library (L.32).	x	x	x	
25. Training, individual and research group consultations, publications on social networks, videos and online tutorials (L.33).	x	x		
26. Training for research in databases for the internal community (L.34).	x	x		
27. Access to the online catalog, Library software app, access to databases, e-book collection (L.35).	x	x		
28. Through social networks he managed to raise awareness about literacy (L.37).	x	x		

Source: Dados da pesquisa, 2022.

The answers of this question reveal some highlights. The activities most cited were related to the library and its resources, such as: Training for search / use library online catalog, library App, database, and e-book collection or Instructing how to construct search strategies. Some answers demonstrate a concern of librarians in the empowerment of users:

“Library as a Digital Empowerment Center (for all ages), access to free online technology courses and events for women’s empowerment, lectures, and cultural actions” (L.15)

“Encouraging academic publication project developing autonomous digital skills so that the user is empowered in the uses of tools” (L.17)

Others are focused challenges outside the libraries: Training in Wikimedia projects; Fighting Fake News. One librarian cited an Innovative project called STARTECA, which is the combination of the words libraries and startup (startup + library in Portuguese). This project is offered to teachers and students, who work on digital and information literacy together, aligned with innovation, entrepreneurship and scientific

initiation for undergraduate students. Unfortunately it does not apply to the external public.

Next question approached the importance of developing and fostering the digital literacy of the academics and the external community of the library. All participants recognized it, and two didn't justify their answers. The responses were grouped by theme.

The justification of the importance of teaching digital literacy most mentioned was because digital literacy is an ability necessary nowadays for both academic activities and professional activities outside the university. It was the reason for 14 participants, as we can see in following examples: "being in connection with the world and with the new skills necessary for personal and global development" (L3) and "Developing digital competence is as important as developing reading competence, as individuals who consciously use technologies have more chances of success both at work and in their personal lives." (L8). Autonomy is the second reason more mentioned for some participants, in order to make their research more effective, for example. In the other hand, some respondents associated autonomy with critical thinking, as we see in the extract: Extremely important, because in the information society it is essential that everyone has a minimum amount of knowledge to autonomously search for reliable and quality data and information, with the critical capacity to analyze them and the creativity to create new knowledge. (L35). Other two participants highlighted the importance of digital literacy for selecting quality information. Three mentioned the contribution of libraries for user, mainly the students, but also external users, as demonstrate the example: "In addition to the role of university professors, librarians can and should share the leading role in contributing to the development of skills for the better use of digital and virtual information resources, both for the internal public and for the external community (L20)"

Two participants pointed out the association between digital literacy and information literacy and media literacy: "Digital literacy is considered a component of information literacy, essential for academic and social life in contemporary times (L14)" and "Currently, it is not possible to dissociate information literacy from media and digital literacy,

as we live in the Digital Age. Today any request and access to information is via the internet, through digital information systems (L27)". Two participant librarians also mentioned the contribution of digital literacy for development of technology and science, like illustrate the example:

For the academic community, the development of skills is strategic for the incorporation of scientific and technological knowledge in scientific and/or technological research, and also for promoting successful technology-based ventures in the academic context. For society, especially lay citizens, the development of skills contributes to the appropriation of science and technology in their social practices, enabling non-specialist citizens to make inferences about the impacts of scientific and/or technological development on their lives, and also, contributes to the technological development of the productive sector, by bringing academics closer to the productive sector. (L.17)

Other three librarians emphasized the social contribution of teaching digital literacy for inclusion of people, as well as encouraging a more collective look at the diverse problems in our society and how we can all look for solutions. Two librarians pointed out the difficulties related to teaching digital literacy, regarding insufficient teams, scarcity of resources, work overload, knowledge about how to incorporate technology into users' learning experiences and library training strategies.

Analyzing the statements, it is noted that they meet target 9.c, "Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet for the least developed by 2020." of SDG 9 , as well as target 17.8, of SDG 17, which foresees "To make fully operational, by 2017, the technology bank and the mechanism to support training in science, technology and innovation for least developed countries and increase the use of enabling technologies , in particular information and communication technologies."

The SDG and the goals described provide guidelines for the activities of libraries, in this research, especially university ones, to guarantee not only access to reliable information, but also promote the actions of investigating

and having autonomy in the search for knowledge and education, in a critical way and reflective, being the protagonist of their knowledge.

In question 8, the participants were asked about the pedagogical practices that they used for teaching digital literacy. 34 answered. Three librarians highlight the difficulties about the theme, saying, for example that “Unfortunately, as librarians, we do not have knowledge about educational or pedagogical practices.” (L.34).

In Figure 3, are the pedagogical and/or educational practices mentioned by participants.



Source: Research data, 2022

As can be noted in figure 3, the main practice is training online and in person. Training in general is used to teach about the resources of the library, like catalog, databases, so, the focus seems to lay on the library and not on other resources outside the library that should be to prepare autonomous citizens. Just five librarians mentioned the use of active methodologies (L 11, L15, L22, L25 and L27). The reason for that can be in the answers of some participants: “Unfortunately, we have no knowledge, as librarians, about educational or pedagogical practices.” (L.35) and “I

don't use it directly, we still adopt traditional methodologies. But I know we need to bring the debate" (L37). This indicates that the higher education institutions and associations need to prepare the Brazilian librarians to work with active methodologies, so that they can effectively contribute to the teaching-learning process of the academic community in compliance with SDG 4. Librarians, aware of the importance of their role as educators, must be willing to participate in didactic-pedagogical training courses and request specific training on this from institutions where they work. Some respondents also indicated the tools that they use: Jambord, social media (instagram, facebook, X), mentimeter, Google Classroom, TeleCentro.

The pedagogical and/or educational practices illustrated in Figure 2 are connected to SDG 4 – "Quality Education". This objective has 10 targets, being one of the SDGs that is most linked to the activities carried out by libraries. What stands out in the answers to question 8 is SDG target 4.4: "By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship". In other words, libraries can carry out workshops, courses, mentoring, use of training tools and services, and information products that are specific to this goal. Regarding the last question (question 9): "Have you, as a librarian, had any experience of developing digital competence?" Twenty-nine (29) answered that they had participated and five said that they never participated and one that didn't understand the question. Some librarians commented on their response.

Some librarians mentioned the kind of experience, for example: offering training, workshops; Teaching classes; use of digital platforms to compose course bibliographies [to help faculties]. Six librarians mentioned the necessity of preparation to perform the activities for promoting digital literacy, participating in training on research in databases and other themes like plagiarism, scientific writing, participating in events in the area and about teaching techniques. One librarian commented the impact of pandemic in how she/he deal with technology: "Because of the pandemic, we had to learn to use new technologies, in order to continue offering a quality service to our users, we had to adapt, and with that we had to

acquire new skills” (L.1). Some mentioned the benefits of developing digital literacy for the students that include, for example: consciously searching the internet, avoiding/identifying the “fake news”. And one librarian cited the experience of developing digital literacy for the public outside the university: “Teach elderly people how to use computers using library computers”. (L.5)

In the answers, it is possible to see a scenario in which the librarian professional needs to manage not only the activities directly linked to library management, but also to information management and the processes of appropriation of information by users. They mention different aspects related to their preparation for teaching and working with technology and digital literacy and some benefits for their users.

CONCLUSIONS

The main objective of this study is to identify the practices of Brazilian university libraries to achieve the Sustainable Development Goals of the United Nation 2030 Agenda.

It was noticed that faced with so many changes in the field of higher education, which directly reflect on the role of the university library, the librarian needs to redefine the library as a space for exchange, for the construction of knowledge that favors collaboration and the autonomy of users, whilst reaffirming the library as a learning space, a place for research and study, adding the status of a space for culture, leisure and updating. As a guide for university libraries to plan their services and space, the 2030 Agenda can be considered essential, providing the university’s internal and external community with services that develop digital competence for internet access and reliable information, providing inclusion and welcoming of individuals and improvements for society.

Although we were unable to obtain responses from many university libraries participating in the groups used for data collection, there was participation from librarians from different regions of Brazil and from public and private institutions, but they provide a very broad overview of

the topic investigated. It was triggered to answer the questions: Do Brazilian university libraries develop digital literacy activities in the perspective of United Nation Agenda 2030? The research made it possible to identify that the 37 university libraries participating in the study have been guided by some of the 17 SDGs of the 2030 Agenda for the planning and development of practices, actions and projects. A brief panorama revealed based on the results, allows us to affirm that a parcel of Brazilian university libraries of this study have contributed to achieving the sustainable development objectives according to the UN Agenda 2030.

Despite all the SDGs have been mentioned by the participants, the SDGs: 4 - Ensure inclusive, equitable and quality education, and promote lifelong learning opportunities for all; 5 - Achieve gender equality and empower all women and girls; 10 - Reduce inequality within and between countries; 3 – Ensuring a healthy life and promoting well-being for everyone, at all ages and 12 – Ensuring sustainable production and consumption patterns, are the ones that stand out most in the research.

What are the good practices of university libraries that develop digital literacy aligned with the United Nation Agenda 2030? There is a highlight for the provision of training, training and courses for searching for databases, journal portals, virtual libraries, search strategies, library physical collection software, elaboration of academic works and scientific writing for teachers and students. The external community isn't the main target, with few exceptions that offer activities like events, lectures, exhibitions, lives, and teaching how to use the computer.

The results are relevant to provoke reflection among librarians and Information Science researchers, with a view to planning and offering digital competence programs aligned with the 17 sustainable development objectives of the UN 2030 Agenda and its targets, as well as ways of its monitoring and evaluation, covering not only the academic community but also the external community.

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