The Goiás Memory Center and heritage education: Reuse of cultural collections and Museum data in schools in a Brazilian country town (Morrinhos / Goiás)

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Abstract

Heritage education is essential for the formation of the individual as it allows him to feel part of the territory, reinforcing his self-esteem and valuing his culture. This concept of education is directly linked to the preservation of material and immaterial heritage as a fundamental right and is also in line with the most updated Unesco documents, which considers this educational bias as one of the great agents of sustainable development. This paper presents the basis of a PhD research in Information Sciences on the use of digital historical collections in schools in the city of Morrinhos, located in the south of the Goiás State, in central Brazil. As it is a city relatively far away from the big centers where the Archives and the Museums are located, the most accessible way to work with historical sources, documents and artifacts is to use digital collections, or school textbooks made available by the government. It was found that these documents and related information sources, as they are available online, do not meet the pedagogical needs of the teachers in the basic education network, as they are difficult to access even when available online. This work intends to contribute to propose a new experience in the use of digital historical collections from the creation of the Goiás Memory Center, an online platform that offers access to the historical and cultural heritage of the Goiás State. Another goal is to design the thematic indexes and collections with an emphasis on the possibilities of educational use of these data, prioritizing the region so that they are made available in an intuitive and affordable way for the school community as a whole.

Keywords

Digital cultural collections; Heritage Education; Museum Big Data 1

1. Introduction

The research presented in this paper aims to bring reflections on how we can promote the memory preservation and tangible and intangible cultural heritage through the use of big data from museums and digital collections and their reuse based on educational applications, that is, Heritage Education. For this we conducted a doctoral research that focuses on understanding these issues and how they are structured from the State of Goiás, one of the 26 Brazilian States, located in the central region of the country, focusing on a case study in the city of Morrinhos, a small city located in the south of the Goiás State.

This paper is structured as follows: in the first part, we focus on the importance and the need to preserve the memory of people and the benefits of heritage education. Subsequently, we bring some reflections on the Museum data and its educational applications from Heritage Education and the Goiás Memory Center – a virtual platform that aims to gather the collections about the material and immaterial heritage of the Goiás State and make these data available online - demonstrating how this space can contribute to the reuse of data from museums and other spaces of culture and memory.

Then, we point out some preliminary results of this investigation and the steps developed, starting with a pre-test questionnaire about the needs of the school community based on the

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potential use and benefits of these heritage data. We then conclude with an analysis of the results of this research so far, and point out the next steps for the conclusion of our work.

2. Memory Preservation and Heritage Education

The preservation of peoples' memory and cultural heritage has become one of the main concerns of society [16] through initiatives carried out by international organizations, governmental institutions and even by private companies. According to Correa and Calliari [8], p. 7, "preserving the historical and architectural heritage is keeping the memory of a city, of a country alive. A people that does not preserve its history will hardly be able to plan its future". This highlights the importance of material heritage (movable or immovable material such as buildings and tools) for future generations.

In this sense, Bosi [3], p. 69, states that "a life story is not made to be filed or kept in a drawer as a thing, but exists to transform the city where it flourished", which reinforces the importance of intangible heritage (intangible cultural assets such as legends, customs and traditions) for social transformation, based on individual or collective memories that contribute to the non-interruption of the knowledge production of a people and also as a way of reducing the impacts on the environment and society where we live.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) works directly with actions to preserve the world's cultural heritage, in particular through the 1972 Convention on the Protection of the World, Cultural and Natural Heritage [19], which emphasizes that the loss of any cultural asset impacts the whole of society, as well as reinforcing the need for nations to commit themselves to carrying out the necessary actions for the heritage preservation. These actions are reinforced since 2015 with the adoption of a plan with 17 Sustainable Development Goals (17 SDGs), an agenda that sets goals for nations to reach by the year 2030, about culture and its preservation [20].

In addition to all these international guidelines, we have in Brazil the Federal Constitution of 1988 [4], in its article 215, which ensures and expresses that "the State will guarantee to everyone the full exercise of cultural rights and access to the sources of national culture, and will support and encourage the valorization and diffusion of cultural manifestations". There is also the National Culture Plan of 2010 [5], which guarantees, among other things, "the right to memory and traditions; the valorization of culture as a vector for sustainable development and the protection and promotion of historical and artistic, material and immaterial heritage". Thus, the need, obligation and commitment of Brazilian institutions to carry out practical actions for the preservation of cultural assets and material and immaterial heritage.

This preservation of a people's material and immaterial cultural assets is not restricted to the need for safeguarding, but also to the carrying out of actions that promote the circulation of this information, scientific knowledge and popular knowledge, particularly so that their own people have access to these contents. These actions are characterized as Heritage Education. According to IPHAN [12]: "Heritage Education consists of all formal and non-formal educational processes that focus on cultural heritage, socially appropriate as a resource for the socio-historical understanding of cultural references in all their manifestations, in order to collaborate for their recognition, its valorization and preservation. It is also considered that educational processes must excel in the collective and democratic construction of knowledge, through the effective participation of communities that hold and produce cultural references, where different notions of cultural heritage coexist".

Taking into account this collective and democratic construction of knowledge, Heritage Education acts directly in the formation of the subject's identity, in order to strengthen his self-esteem and his notion of belonging to a group and to a place. Still, it also acts as one of the aspects of the preservation of the cultural and immaterial heritage for promoting this circulation of

knowledge, and consequently its reinterpretation and reframing according to the context in which it is used.

For the construction of reflections and knowledge production based on Heritage Education, it is necessary that people have access to these materials, that is, to the tangible and intangible cultural assets preserved for, according to Ferreira and Oliviera [9], p. 100, "To demonstrate the relations of permanence and changes or similarities and differences between societies located at different / different times, as well as in multiple spaces, as to the way of thinking, acting, producing knowledge, building, etc.". Thus, we understand that, based on these educational actions, the person is able to perceive himself as a full citizen in a society, that is, to recognize himself as an active and participative subject of all the rights and duties that characterize his existence in the world.

3. Museum Data and their Applications in Education

Based on this understanding of the need for access to these cultural objects to carry out the specific educational activities of Heritage Education, it is necessary to address the use of digital collections and, in particular, the use of museum data and other spaces of memory and culture in the educational setting.

The availability of cultural collections in digital format and open to access is a strategic factor for this circulation of knowledge and for people to have access to heritage. This is reinforced by some obstacles that surround physical collections and memory spaces, almost all related to economic issues.

As Brazil is the 5th largest country in the world in terms of territorial extension, to talk about the difficulties of access to memory spaces depends on where people are located, even though some issues are fairly general, for example, those related to the low investment in the country's culture as a whole.

Our research is carried out in the Goiás State (in the central region of Brazil) within the scope of the Goiás State University, a public institution that is present in 39 cities in the State. According to a 1997 survey, the Midwest region had only 4.8% of all museum spaces in Brazil, being the second region in Brazil with the lowest incidence of these memory spaces.

This data confirms an aspect about the difficulties of access to historical and cultural materials about the History of Goiás, considering that the historical and memory documents exist, however they are scattered throughout the State in multiple institutions, instead of in large archives that could centrally gather the history and memory of the region. Another difficulty, in addition to the few organized memory spaces in the State, is that they are concentrated in large cities and access is also hampered by the lack of investments in the structure of these spaces. In addition, there are problems related to the displacement of the population, especially students of public schools, with known social and economic vulnerabilities.

Still on the Goiás State archives, many of them are managed by the Catholic Church, in the headquarters of local Dioceses and Parishes, or even in private institutions such as, for example, the baptism, marriage and death records of the city of Pirenópolis, former Meya Ponte. The originals of those documents are not available for consultation, but photographic copies of them are available at the headquarters of the Institute for Research and Historical Studies of Central Brazil (IPEHBC), which is a space linked to a private higher education institution located in Goiânia, capital of the Goiás State.

These spaces and physical collections that gather materials on the History of Goiás are already difficult to access and complicated to organize even for researchers who have resources and the ability to move around the territory in search of documents that are already known to them. So, if we consider the school reality and the actual access of ordinary people, this is a decisive limiting factor so that the community in general does not have access to these memory spaces.

In her book on permanent archives, librarian Heloisa Bellotto presents the archival science view, stating that "the role of archives has not been a concern for educational assistance services, but has been explored in Brazil, although pedagogy has been innovative and progressive" [2]. In other words, for the author, archives have much more to contribute to Brazilian education – from the perspective of local history – than has been requested, and this concern for heritage education itself should be one of the structuring lines of these document preservation institutions.

Oliveira and Moura Filha [14] stated that the difficulty we have as a community in incorporating material and immaterial culture into Brazilian culture is related to the turbulent and disruptive moments in our social and political history, which directly impact how we deal with the preservation of diverse memory spaces, such as buildings, landscapes and objects in general. Heritage education, in this case, would be essential to create a connection between society and heritage, reinforcing the importance of creating agreements and articulations that make these projects and practices viable.

For Fratini [10], heritage education is directly linked to the concept of democratizing access to memory spaces, and it is necessary to think of ways to include society in this field, through actions that are not exclusive, including only researchers, but also citizens as a whole, so that they recognize themselves as an integral part of this historical-cultural heritage.

In this sense, the digitization of these materials and their availability in digital collections with the use of Museum data has an even more important function in our territory, in view of all these difficulties. According to Martins and Dias [13], p. 1: "In the quest to reinvent informational activities, memorial and cultural institutions have developed projects to digitize their collections, using new tools, especially the Internet, to transform the diffusion cycle of these cultural goods. By making it available on digital platforms, access to cultural objects is expanded, hitherto restricted to visits to the physical collection."

This is an interesting characteristic that the cultural institutions themselves realized, that the few collections made available in digital format on social networks or other virtual exhibitions attracted the attention of more visitors. According to Gama and Rangel [11], p. 6, "Access to data in an open way increases visibility and solidifies the relevance of institutions, expanding access and" use "of collections, both by institutions and by their users, promoting coordination between institutions and policies for preservation and dissemination."

We can also see that this availability of digital collections online and of free access can be seen as another collection, precisely because of the infinite possibilities of reuse of these collections. It is as if these materials were reconfigured, from other contexts of use, in new materials, with new purposes, through interlocutions developed by users [17]. The use of this data from museums and other digital collections in educational applications fits within these specific characteristics of reuse, since the data available online are connected with other materials and documents from a digital curation. As a result, it becomes viable to use these materials in school activities that were previously restricted to researchers only.

It is also important to remember that it is not enough to just make available an huge quantity of documents and varied collections online, it is necessary to minimally build possibilities for creating a pedagogical path within these digital collections, according to the needs of users, whether they are teachers or students.

According to Scaico, Queiroz and Scaico [18], "the use of Big Data can gather and analyze an immense amount of data that is produced by teaching and learning relationships". Thus, we can still analyze later how these data are used to, from that, think about new ways of making available content that is more accessed and that should be highlighted. This opens up new uses and several other educational possibilities than the physical materials are not able to achieve, through data mining, that is, by identifying relationships between the data and from that create new knowledge [15]. Based on these considerations, we started some projects for digitizing collections and started an organization that could manage the information and the documents about the material and immaterial heritage of the Goiás State.

4. Digitization of Collections and the Goiás Memory Center

Since 2012, the Goiás State University (UEG) has been carrying out specific actions, through community extension projects, with the objective of thinking about ways to preserve the cultural and historical heritage of the Goiás State. These actions were initially developed from the approximately 20 courses in History and Geography of the Goiás State University and took place within the communities where these courses are offered, and which are distributed across Goiás State.

The specific actions in the History area, for example, aimed to digitize the largest possible volume of documentation, in view of the risk of loss these materials, due to the inadequate accommodation of these collections, exposure to humidity, insects and all sorts of deterioration. However, this created another problem, which was the concentration of a large volume of data without a standardized organization, which makes it difficult for these collections to be related to others. These actions took place in a disconnected manner until the year of 2015, when discussions began to be systematized around a common program that brought together all these actions, which culminated in 2017 in the implementation of the Goiás Memory Center program.

The Goiás Memory Center of the Goiás State University, according to its regulations, is a space: "aimed at fostering, systematizing, articulating and monitoring actions aimed at the rescue and preservation of the history and memory of the central west region of Brazil, especially the old and current territory of the Goiás State"(2017), that is, it is a program that aims to gather and concentrate discussions and actions related to the memory and history of the people of Goiás, based on the preservation of cultural heritage material and immaterial of the State.

This was initially thinking about some projects to cover all this rescue of materials, based on actions related to 4 axes. The first is the Documentation axis, which brings together actions related to the digitization of textual documents (sanitization, organization, digitization and storage); the second is Oral History and Image, which brings together actions aimed at recording and producing audiovisual materials on the memories and traditions of the people of Goiás (with an emphasis on black and indigenous peoples); the third is Archeology, with the objective of managing the archaeological collections that are distributed by the UEG campuses; the fourth axis is Education, Memory and Heritage, focusing on the organization of Heritage Education actions, using materials and data from all the previous axes, that is, this fourth axis acts directly on the reuse of the digitized and organized collections and data within the scope of the Goiás Memory Center, with the objective of producing, from specific curatorships and mining of these data, ways to apply them to the educational context.

To this end, we developed three pilot actions, within the scope of the Memory Center, in the cities of Uruaçu (North of the State), City of Goiás (central region) and in Morrinhos (South of the State), all with the objective of digitizing documentary collections and to see in practice how these issues would develop. In addition to the limited release of resources for these specific activities, a problem initially encountered was the poor state of the collections, which implied previous sanitization work, which greatly delayed the realization of the digitization. All these actions to preserve memory and cultural heritage within the Goiás State are a step behind most of the museological institutions and international memory spaces, considering that, before starting to open these collections online, there is still an huge effort to organize and then digitize them, since the vast majority of spaces in Goiás do not have digitization of collections or for internal use.

The situation found in the Uruaçu collections, for example, is that of materials left in a room without even an index of what exists in that place, as the image below demonstrates:



Figure 1. Storage of the Uruaçu collections. Photographs by the authors.

In the collections of the city of Goiás, the documents are sanitized and have a simple organization, with little information, as seen in the example below of a document folder of the Museu das Bandeiras, in which the only information that appears is the date of the documents in that package (1804-1896) and where they come from (City Hall and Church), as shown in the image below:

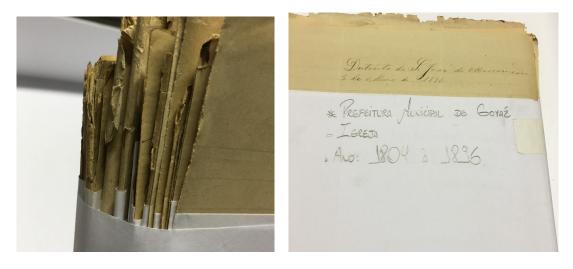


Figure 2. Collections of the city of Goiás. Photographs by the authors.

In the case of Morrinhos, the documents found in the Parish of Nossa Senhora do Carmo, for example, are organized in bound books, but very damaged and packed in a very precarious way, according to the images:





Figure 3. Collections of the Parish of Nossa Senhora do Carmo. Photographs by the authors.

The actions taken for organizing these materials and digitizing these three collections above are being carried out with History teachers along with trainees from the History courses themselves, who end up aggregating these practices and dealing with files in their academic training. The difficulty of access to cultural and historical collections that deal with material and immaterial cultural heritage, be it physical distance, the lack of access to original materials due to the characteristics of the management of spaces or the difficulty in finding the few documents, hampers the use of those collections in schools. This is a main drive for our research that focuses on thinking of ways to give people the opportunity to have access to its own history, in particular, through Heritage Education and the reuse of data from Museums and memory spaces in public schools in the Goiás State [7].

5. Research Work in Morrinhos and Preliminary Results

To develop this research, we chose only one city, the city of Morrinhos, because it is a smaller location, with fewer collections and schools, and where we teach the Didactics and Methodology of Teaching History courses. It is thus easier to propose the mandatory internship of the students from the perspective of Heritage Education and the teaching of Local History with the school community. This allows us to act in the training of interns and teachers of the State in a mutual way and also in the production of educational materials, through digital curating that the university itself can and has developed sporadically.

The idea of starting the procedures for digitizing and organizing this data and materials from the beginning thinking about their use and educational applications is an interesting experience, since we can apply, from the first actions, the research methodology of User Studies. This is one of the methodologies of the scientific field of Information Science, and guides us on the definition of a platform entirely focused on the needs of the school community in the city of Morrinhos. According to Araújo [1], p. 199: "This model emphasizes the users' perceptions regarding their own lack of knowledge, the steps taken to solve this absence (towards information) and the use of information to perform a certain task or problem. In place of sociodemographic characterizations, such studies identify users' perceptions of their situation and information as a determining element of the process. The entry into the scene of user studies puts the subjects in perspective. Information starts to be seen as something from the perspective of a subject."

That is, the purpose of the actions is to build a digital collection organized according to the demands of these subjects, so that the data makes sense from the context and universe of knowledge around the teaching activity, and not to build a platform to access this knowledge and materials according to academic planning and developed purely by the researchers.

To this end, we developed a substantial questionnaire to be applied to History teachers in the city of Morrinhos, based on 28 objective and subjective questions, which aimed to discover: aspects related to the academic training of these professionals; the number of hours they taught classes per week, relationship with collections and documents in digital format, degree of familiarity with the internet and search tools; use of historical and cultural sources and collections in the development of their classes; content and themes for which they have more difficulty finding materials; how long it takes them to prepare their teaching materials, whether the digital collections as they are currently available meet their needs; how they would like to have access to this data and, furthermore, whether they are interested in training courses provided by the university for the use of these collections.

The path defined for the realization of this questionnaire was, first, to apply a research pre-test, that is, to carry out a kind of rehearsal of the interview with a similar community so as not to harm the official sample, in case any adjustment had to be made. According to Carmo [6], p. 6, "the results of the pre-test are then tabulated so that the limitations of the instrument are known, the proportion of responses of the type I don't know, of difficult, ambiguous and poorly formulated questions, as well as comments made on certain issues."

For this, we chose to send the pre-test to History teachers from two neighboring cities, Buriti Alegre and Caldas Novas, who have approximately the same proportion of schools per inhabitant as Morrinhos and, also, because the teachers chosen to answer the instrument also they are, in their majority, former students of the courses of History of the UEG of Morrinhos, which assures, in a way, the same basic academic training of the respondents of the official research.

During the pre-test, we had three responses from each city, totaling six questionnaires answered and a positive assessment of the questions by the respondents. Everyone liked to answer the survey and felt valued for having been asked about their needs and demands before the construction of the digital collections proposal.

Few adaptations had to be made for the application of the official questionnaire, allowing the instrument to remain the same, and in this way, we were able to extract previously that, according to the pre-test respondents, the biggest problem for the use of digital collections in the preparation of classes and school activities is a huge workload, so there is no time to properly prepare classes using these materials since everyone responded that the digital collections available online as they appear today, do not meet your needs while teachers. All of them also answered affirmatively about the desire to have a digital collection organized according to the required contents and skills, according to each grade and school year, to facilitate the search and access to this data.

On this specific question - Would you like to have access to a set of sources and digital historical documents organized according to your needs as a history teacher? - the responses that followed were: "Yes, because it would reduce uncertainty about the right usage", "It would be much more feasible, as it would make it easier for the teacher to find the necessary content at the time of planning", "Yes, because it would make easier and save time for the preparation of classes", "Using these sources would be closer to the reality of our students, and having classes with digital tools would attract students".

We highlight, in particular, this last answer, since one of the most modern aspects of the reuse of collections for educational purposes is directly related to the possibilities and relationships between digital technologies and the contents of the school curriculum.

These responses were very significant and served, once again, to reinforce the need to build spaces for the circulation of information effectively, that is, to think about digital collections or memory centers and other spaces that are in fact accessible to the general community and not only for researchers who have access and know where and how to look for the information needed to

carry out their work. From that, we became convinced about the importance and the need to carry out this research and the work in progress in relation to the Goiás Memory Center.

6. Final Considerations

From the realization of this pre-test, some items were adapted — about 5% of the questionnaire — which, according to Mattar (1994), proved to be a good questionnaire to be applied, considering that few changes were necessary to achieve the intended answers. The next step was the application of this questionnaire, now in a final version, for teachers in Morrinhos schools, remembering that our preferred public is the school community of public schools.

The main goal of the application of this questionnaire was to systematize the answers and think about a prototype for the heritage education area of the Goiás Memory Center. Later, we made this prototype available to teachers in the first school semester of 2021, so that they could teste it and verify if their demands were met.

From the validation of this model, with the availability of a few collections and museum data, we could enable a model for feeding these materials and a form of collaborative work between the digitization of collections, the organization of these materials and data online and their reuse. For example, through educational actions and production of materials that teachers can access in a simpler way, thus promoting an improvement in their practices in teaching History or any content related to Heritage Education.

In this sense, the lessons learned from this research are part of the need to think about legal frameworks and pedagogical resolutions that can guarantee the maintenance of this ecosystem, on both sides, both through the constant approximation between research and studies developed at the university, through extension actions that aim to bring researchers closer to the community in which they are inserted, and through the ongoing training of school teachers and the constant connection between these subjects so that, even after graduating, they continue to be invited to participate in pedagogical actions and research groups that reflect their practices in the field.

As one of the most interesting results and possibilities highlighted by this study, we have already established a research group that intends to reflect and build teaching and learning practices with the teachers who participated in the focus group and including the participants in the pre-test who continue to be very interested in accessing these digital collections repositories. This channel of constant communication with teachers can act as an observatory of teaching practices and act at the root of some serious problems that were highlighted through these dialogues with this category. Despite being extremely relevant for the promotion of social transformations, these issues were not in the initial proposal of this research, which focused on thinking about how we could promote access to cultural assets so that the population appropriates and feels like a participant in this cultural heritage and how to instill in people the notion of belonging and ownership regarding this memory.

The idea with this research is, in fact, to promote access to memory and the history of a place, space and people to the subjects themselves, thus transforming reality in a practical way, reinforcing the self-esteem of these peoples and building together with them the notion of full citizenship, that is, the idea that they are important and essential in the processes of building knowledge, as well as being actively responsible for the direction of their future.

Declaration on Generative Al

The authors have not employed any Generative AI tools.

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