

Methods of Working With Local Digital Resources on History: Foreign Experience and Russian Practices

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ABSTRACT

This study aimed to identify the best techniques and approaches to working with digital resources on history suitable for both scientific research and teaching. The methodological basis of this study was the author's methodology for measuring the level of students' involvement in working with digital resources on history. The conducted empirical research revealed this level to be average since as much as 98% of respondents turned to the resources of e-libraries for educational purposes, and 46% of interviewed used online-based historical archives for academic activity. The study showed that the main way of conducting historical research in the context of digitalization is to work with images and scanned copies of scientific papers. The obtained materials and conclusions can be included in the curricula of academic disciplines for students of historical specialties at the undergraduate and graduate levels of Russian and foreign universities.

KEYWORDS

Digital History, Digital Knowledge Space, Digital Reality, Digitalization, Digitalization of the Humanities

INTRODUCTION

The current trends of the development of society demonstrate the substantial intensification of digitalization affecting all spheres of human activity without exception (Denning & Tedre, 2019; Gibbs & Owens, 2013; Haskins, 2007). One of the most notable achievements of the last century's mid-80s is the rapid spread of the internet and information and communication technologies (ICT). As a result, numerous highly-developed resources allowing official structures and individuals to build an accessible database of various materials, like projects for visualization, 3D modeling, and augmented and mixed reality systems related to historical science and history education, have begun to be created (Fino-Radin, 2012; Gaffield, 2000; Laato et al., 2021; Morville & Rosenfeld, 2006). From the pedagogical point of view, the formation of critical thinking occurs in the process of using such practical tasks that give students the opportunity to evaluate information, to draw their own critical conclusions (Oberman & Sainz, 2021). The development of critical thinking skills in pedagogy is based on the development and implementation of tasks based on the identification of information,

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its critical assessment in terms of reliability or inaccuracy of data, critical discussion and expression of their own generalizations and conclusions based on an objective vision (Hegazy et al., 2021).

Even though being highly mature, today's level of development and distribution of digital content poses several urgent questions to the system of history education. The first relates to the issue of how to deal with the problem of history falsification, which has become a mass phenomenon due to the massive spread of web-based resources. Nowadays, even one internet user with access to digital archives but with no sufficient skills to conduct historical research can generate an entire wave of falsifications of historical facts and events. The second question concerns the possibility of conducting grounded historical research relying solely on digital content. Apart from this, it is still unclear what are the most effective methods to teach students to work with digital historical resources. The need to develop reliable tools for teaching how to research using e-libraries and archives is the primary task of the modern system of higher history education.

In terms of pedagogical perspective and opportunities, the study of the problematic issue of teaching history with the help of digital technologies is relevant, because such a learning process is considered modern and innovative, aimed at developing professional competencies and skills of students (Lee & Daiute, 2019). Pedagogical innovations allow to build logical connections during the study of history, to critically and objectively evaluate historical events (Walder, 2017). In practice, the modern world is in the midst of a digital revolution in historical research techniques and methods (Council of Europe, 2018; Mingsiritham et al., 2020). The new way of work of the research historian can be called 'on hand archival research' since the precondition for its carrying is the availability of trustworthy content from online-based resources. Such resources' accessibility and quality should be ensured by organizations and scientific communities with a confirmed scientific status. The presence of a huge number of such informational web pages, as well as already familiar forums and social networks, leads to the fact that everyone can post a document of historical research interest (Martin, 2020; Povroznik, 2020). However, the problem here is that an incorrectly attributed source, taken out of the context or environment of its creation, can direct research along the path of history rewriting.

As such, the path of historians to the digital space is laid through the need to use information technologies in the analysis of large-scale statistical data (census surveys, demographic reports, etc.). But the real cooperation of historians and the digital environment began precisely with the emergence of e-libraries and e-archives. As a consequence, many scholars have focused on the discussion of critical approach and assessment of internet resources when considering the problems of finding digital sources and the possibility of their use in research (Alexander & Marsha, 1996; The World Wide Web Virtual Library, n.d.; Vlassenroot et al., 2019). Today, working with e-libraries and various online materials can be turned into effective tools for history education and investigation. The reason is that they provide a large amount of data in the form of e-books, images, audio and video recordings, and training programs (Auer, 1998; Burton, 2005; Collins, 1996; Descy, 1996; The Internet Archive, n.d.). Among the first e-catalogs created, the World Wide Web Virtual Library started by Tim Berners-Lee deserves a special mention. A characteristic feature of this resource is its non-commercial basis. Unlike profit-oriented catalogs, it is run by volunteers, who compile pages of key links for areas in which they are experts (Martin, 2020; Owens & Padilla, 2020; Rosenzweig, 2003).

Active attention to digitalization issues in all spheres of human activity contributed to the formation of a new scientific direction called Digital Humanities (DH) and subsequent elaboration of the Digital Humanities Manifesto in March 2011, presenting changes in the humanities affected by the digital revolution (Garskova, 2018). The start of discussions on the problems and prospects of DH in the Russian Federation (2011-2012) has raised the question about the place of historical research within this concept, taking into account the particular background of Russia as a developing country. The specificity of this background is determined, first of all, by the fact that the use of computer technologies in Russia's historical science has a strong tradition that was not interrupted in the first decade of the 21st century, as in most European countries, where the institutionalization of DH led to the emergence of the digital history (Borodkin, 2019). Scientific developments of

Russian researchers in this area appeared somewhat later than abroad, which is associated with the theoretical and methodological rethinking of historical science in the 1980s-1990s (Haward, 2020). Russian scholars have mainly focused on the development of interdisciplinary approaches and a new methodology combining research methods and techniques inherent in the natural sciences and humanities (Mozhaeva, 2015; Volodin, 2014a, 2014b). Many studies have also focused on the idea of forming a digital culture as a unique culture type (Galkin, 2012; Gnatyshina & Salamatov, 2017; Prokudin & Sokolov, 2013). At the same time, no articles were found to analyze the information base accumulating in the internet space.

The digitalization of historical resources in Russia was caused by the active spread of the internet and an increased amount of materials available to historians for creating online content. Such state of affairs provided the background for a sharp jump in the number of specialized websites and digital resources that frequently were fragile or not user-friendly. However, since the early 2000s, the quality and usefulness of digital resources have grown remarkably. The field pioneers began to consult with experienced developers to improve the available technologies, encouraging a new generation of historians who grew up with computers to become active creators of digital history resources.

Given the rapid digitalization of historical knowledge, the central aim of this work is to develop methods of working with both newly created digital history resources and already available ones. For this, the present study conducts a comparative analysis of digital materials on history, taking into account the possibility of their use in the educational process and scientific research. The examination is based on the study of Russian and international experience and the traditions of a systematic approach. This gives a more complex vision of the area under consideration with its inherent interactions and interrelationships. Particular attention is given to the Russian experience, which determined the specifics of the Russian model of digital history in the context of general trends of the European model's development. The current research is expected to reveal the level of involvement of students of historical specialties in working with dedicated digital sources and e-libraries in the process of studying historical disciplines. Besides, it aims to show how to conduct historical research in the context of digitalization, outline techniques for selecting digitalized historical data, and draw the rules of adequate assessment of web pages devoted to historical studies. By doing this, the paper seeks to foster an understanding of how historians collect, code, analyze, and interpret data.

The study authors proceed from the fact that the main way of carrying out historical research within the framework of digitalization is to work with images of sources and scanned copies of scientific papers as it allows the following:

- (1) Developing critical thinking and gaining experience in using primary sources for historical research;
- (2) Introducing everyday tools that are not usually used in training;
- (3) Acquainting students with the possibilities of digital resources used by historians and other experts in the field of humanities and social sciences to conduct historical research;
- (4) Balancing the history content, which usually depicts the 'historical elite,' by focusing on the daily lives of ordinary people.

MATERIALS AND METHODS

Research Design and Sample

Initially, students were e-mailed invitations to participate in the survey. With their consent, a questionnaire with questions was sent. The first research stage (theoretical) presupposed analyzing five Russian and five foreign e-archives. Their selection was based on the results of students' surveying and pedagogical experience of the authors in using them in teaching and research by Russian students-historians. Analysis of these web resources made it possible to make a descriptive

overview of the current state of digital history in Russia and the world. The second research stage (practical) implied giving recommendations on how to use digital history resources most effectively. The survey consists of the following questions: “What digital history resources do you use to study history during your studies?”, “Determine the level of intensity of digital technology use before and after distance learning?”

The process of surveying was conducted in two stages and assumed the completion of oral and online questionnaires to identify the most preferred web-based sources of historical information. The period of the beginning of the COVID-19 pandemic and the transition to distance learning (April 2020) was chosen as the time boundary between the surveys, which made it possible to trace changes in the dynamics of the use of digital resources when learning offline (data for 2019) and online (data for 2020). The respondents' cohort was represented by 448 students of 3-5 years studying Pedagogical Education (profile – History) at the Faculty of Philology and History of the Elabuga Institute of Kazan Federal University. The demographic distribution of the survey participants was based on Kazan (Russia), as the universities on the basis of which the experiment was conducted are located there. The experiment involved students aged 19-22, 300 - women, 148 - men. The main criterion of the sample was professional, as the basis of the study is the effectiveness of the use of digital technologies in the study of history, so all participants studied at the Faculty of History.

The study is based on a model of learning based on modern digital technologies, which aims to increase students' motivation to learn, the development of professional skills and competencies, including critical thinking.

Ethical Issues

Participants' surveying was completely anonymous. All ethical principles of the investigation were respected and met.

Statistical Processing

The online survey was completed using Google Forms, in which questions and answer options were prepared in advance. The generalization of the testing results was carried out by the method of summary analysis.

Research Limitations

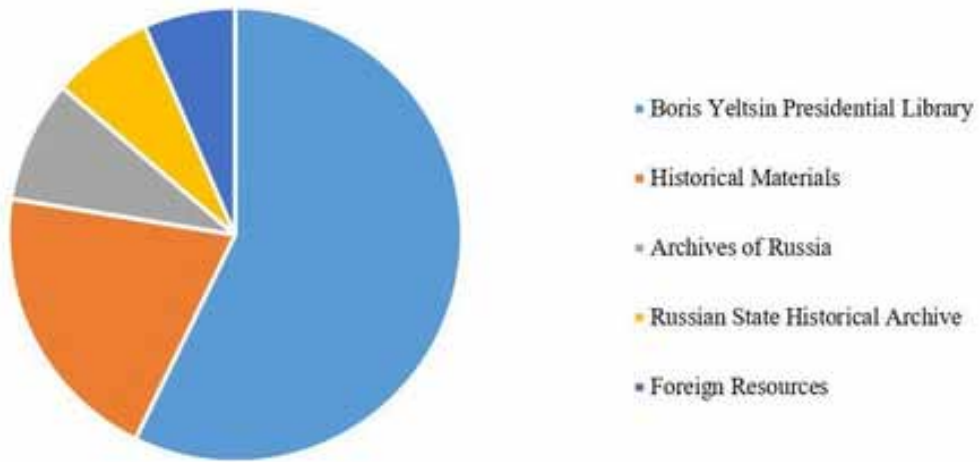
When selecting research participants, the structural identification method was used. The respondents' professional interest in studying history and conducting historical research was fundamental for the experiment planned. Therefore, only university students studying history were selected for the survey. Given the need to identify the level of students' involvement both in educational (preparation for practical classes, exams) and research activities (writing articles, completing coursework and diploma projects), the study group enrolled students of 3-5 years as, except for the usual preparation, their curricula provided for carrying out research activities.

RESULTS

Digital Resources on History: Use Frequency By Types

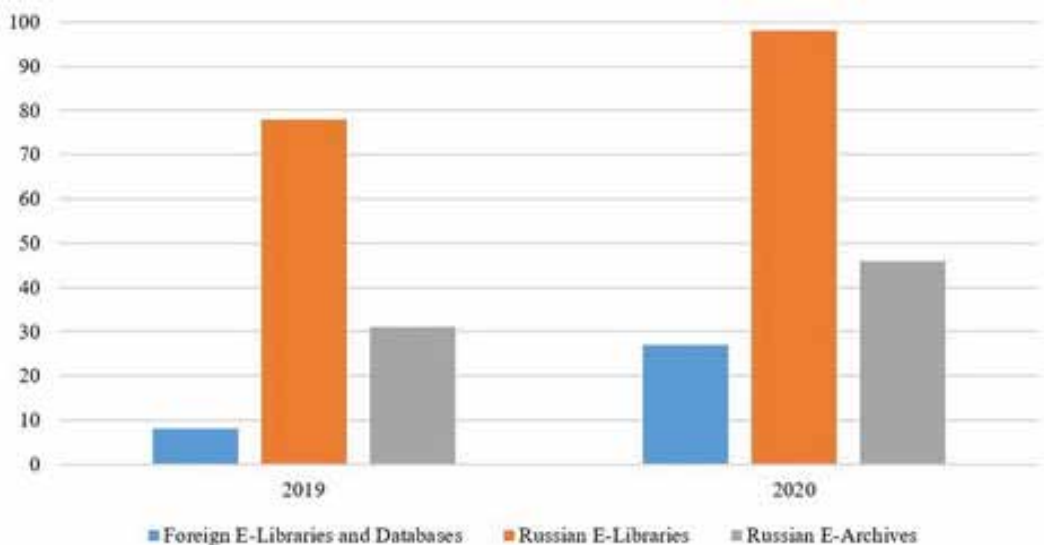
Figure 1 presents the most widely used internet resources on history named by students. These are the Historical Materials website (used by 20% of the respondents), the official web page of the Boris Yeltsin Presidential Library (used by 57%), the Archives of Russia portal (used by 9%), Russian State Historical Archive (used by 7%), and a number of foreign resources (used by 7%).

Figure 1. Top Digital resources on history used by Russian students



The changes in their usage intensity (students' involvement) before and after the distance learning introduction are depicted in Figure 2. A high level of involvement implied the use of online-based resources to organize research activities. Its central indicator was work with specialized historical databases. The average level assumed the use of digital resources for teaching and educational purposes. In this case, the search for information was supposed to be carried out in e-libraries' databases. A low level of involvement was recorded if respondents were likely to perform no systematic work with specialized historical resources, and information search was rather carried out through popular search engines (Google, Yandex) using keywords.

Figure 2. Dynamics of using digital resources on history by Russian students



The conducted empirical research revealed that the level of involvement of Russian students of historical specialties in working with specialized digital resources is average. This inference stemmed from the fact that, as of 2020, e-libraries for educational purposes are used by as much as 98% of respondents, whereas only 46% of them feel free to benefit from e-archives when conducting scientific research (writing scientific articles, term papers, and final qualifying works).

The comprehensive analysis of survey outcomes showed that the spring 2020 shift to online education led to a sharp increase in the frequency of using web-based resources for studying, reading, or researching materials on history. For the period from 2019 to 2020, the interest of respondents to the world's digital resources on history increased by 19%. Alongside this, the survey exposed a slight rise in search queries in Russian web archives (by 15%). In the comments to the open-ended questions of the questionnaire, students indicated that they use such resources when working on term papers or final qualifying works but emphasized the lack of full-text copies of sources as their drawback.

Based on students' answers, three groups can be formed: the lowest (15%), middle (35%) and upper (50%) response groups in line with the answers.

Digital Resources on History: Overview and Prospects

The Archives of Russia has been operating since 2001 as a specialized discipline-specific mass media portal (The Archives of Russia Portal, n.d.). This scientific and reference resource makes it possible to familiarize with the structure of Russian archival system, with electronic inventories (for some archives), and with a database of declassified documents of the federal state archives. It contains unique documents from the Archival Fund of the Russian Federation converted into digital format. Even though the number of posted documents is not significant yet, the database is constantly updated. While working with the section State Register of Unique Documents, one can use search queries to find the necessary document, its storage location, archive code, annotation, and, in some cases, even a preview sample. The section also contains numerous photographic documents such as, for example, 12 of 360 unique family photographs from the personal family album of Alexander II (State register of unique documents, 2003). Another useful function that the Archives of Russia proposes is the possibility to work with bibliographic indexes and a library containing a limited list of full-text publications. Even though being quite representative, one should admit that the materials of the portal can be used only at the initial stage of the historical search when the researcher is only choosing the archive to work with (and even in this case it is far from being suitable to discuss all the problematic topics) (Figure 3).

Having become the starting point for new research, Archives of Russia will allow finding a specific archive with necessary materials. One of them may be, for instance, the Russian State Historical Archive (Figure 4) (The Russian State Historical Archive, n.d.). Its official website offers several methods of organizing research according to different search criteria: nominal, geographical, subject, topographic, directory, and thematical. By choosing the search direction, the researcher can see what documents are stored in the funds of this archive. Nevertheless, this is where the digital search ends since the required document can only be obtained in the real reading room. In general, the sites of Russian federal archives do not provide an opportunity to search in an on-hand manner. Though, despite the fact that the digital space of the Russian archival system is only at the preliminary stage of its formation, it can be used to teach students to organize work with archival funds.

In some specific cases, Russia's digital space allows bringing the inquiry to its logical conclusion. For this, narrow-focused websites, like the Old Russian Birch Bark Letters, can be used. The Old Russian Birch Bark Letters contains a collection of the most valuable historical letters written on pieces of birchbark dating the 11th-15th centuries. This digital database includes photographs of certificates, their original texts, and translations into modern Russian. The resource allows one to search for letters by geography (city name), state of document's preservation (whole document, fragment), categories (business records, diaries), and the name of the excavation site where the letter was found (Old Russian birch bark letters, n.d.).

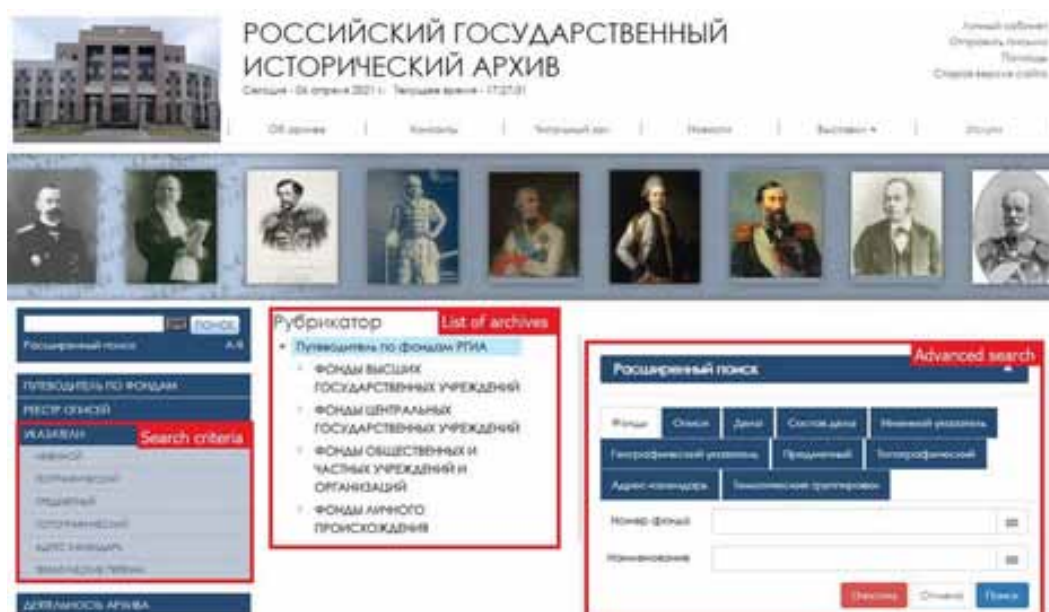
The visual turn in history has led to a dramatic expansion of the range of sources, leading to the active posting of numerous images, photographic documents, and material evidence of varying nature. In most

cases, such sources are concentrated in museum collections and private archives. The opportunity to work with digital materials of museum funds is provided by the State Catalogue of the Museum Fund of the Russian Federation. It gives access to a collection of materials from both central and regional museums of Russia, which enables one to read, acknowledge, and work with a variety of collections. The cataloging of museum items is carried out by several categories (painting; graphics; objects of applied art, everyday life, and ethnography; documents; weapons, etc.), whereas the search can be performed by keywords or by museum name.

Figure 3. Archives of Russia



Figure 4. Russian state historical archive



The development of e-libraries is extremely important for Russian history. Unlike traditional libraries, whose materials are limited to those who can physically access them, e-libraries can reach a much larger number of visitors and present more ways to use the information. Innovative e-libraries in Russia are more than just stocks of documents. These are digital collections of library resources and services that meet the unique user's need for reliable narrowly focused data. They are often viewed as more user-friendly because of the opportunity to access online documents at home instead of going to a physical institution. To become an e-library, an online resource is to meet three criteria. First and foremost is to have a set of digitized and posted on the web documents, with the relevant metadata and original formatting preserved. In the next place is the requirement for online provision of a number of services, including requested data. The last point is that an e-library must meet individual user's needs for adequate information.

Libraries that are actively digitizing the accumulated materials are of particular interest to the professional community of historians. One of the brightest examples is the Boris Yeltsin Presidential Library (Figure 5) (Boris Yeltsin Presidential Library, n.d.). It presents information sources in three blocks:

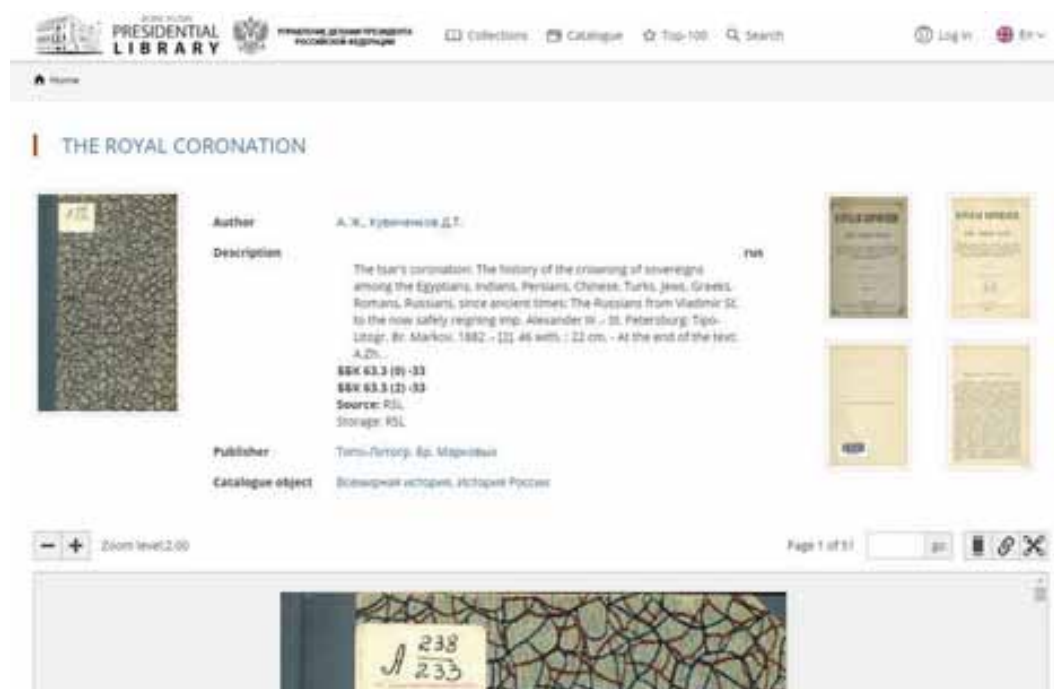
- (1) Collections – includes basic collections (Authority, People, Regions of Russia, Russian language) and collections arranged by specific feature (Topics, Persons, Regions of Russia, Russia and the countries of the world) and type (Periodicals, Abstracts of dissertations, Educational editions);
- (2) Catalog – block, where information is grouped by scientific fields (for example, Social and Humanities, Science, Technology and Technical Sciences);
- (3) Top-100 – block with the most popular materials.

Figure 5. Boris Yeltsin Presidential library



In general, given the abundance of data, it can be argued that the resources presented on the official website of the Boris Yeltsin Presidential Library allow carrying out a scientific search for historical information without leaving home (Figure 6).

Figure 6. Boris Yeltsin Presidential Library: resources



Separate history-oriented internet resources were initially developed as joint non-commercial projects devoted to foster historical knowledge and discussions. In particular, the Historical Materials has combined the information resources of several projects: The Lost Empire, Myths of the History of the USSR, Vive Liberta, and Yaroslavl Regional Public Fund Stalinsky (Figures 7 and 8) (Historical Materials, n.d.). At the moment, the Historical Materials contains 26,640 documents, 5,257 publications, and 16,760 files gathered together by efforts of numerous people worldwide. The authors of the project, including a Ph.D. in Economics, a Ph.D. in History, and a chemist, focus on different periods of Russia's history and talk about the background of world democratic, liberation, and revolutionary movements. They remark that any participation and contribution to the already available material is welcomed (Historical Materials, n.d.).

The main sections presented on the Historical Materials website are grouped as follows:

- Library – digitized books and articles;
- Documents – digitized written sources of varying nature;
- Statistics – statistical collections, thematic reference books, regional statistics, foreign statistics, atlases;
- Myths of the USSR's history;
- Vive Liberta – historical research library;
- Gallery – photographic materials;

- Forum;
- About us.

Figure 7. Historical materials



Figure 8. Historical Materials: gallery



When working with different sections, for example, Library or Documents, one can receive information about the details of the digitized materials and therefore describe the information used correctly. Within the framework of the Forum, registered users share their opinions and assess the exhibited data sources. The well-laid-out content of this resource allows making the inference about a professional and high-quality approach to material publishing.

In the process of using historical material retrieved from the internet, a researcher should never forget about two crucial points: data reliability and information balance. On the other hand, developers of history-oriented websites should also take responsibility for their readers. Creating or integrating into a single historical information infrastructure should go in line with the meaningfulness of scientific source's digitalization.

In order to use digital history resources most effectively, users are recommended to adhere to the following rules:

- Make sure to visit the right page. To do this, answer the questions: Does this site touch on the research topic? Is it worth visiting, or data needed can be found in printed sources (quick-reference guides, books, etc.)? One should remember that, unlike traditional printed issues, web resources rarely have editors or proofreaders. Currently, there are no web standards for accuracy.

- Be critical of the web page content. Reasonable scientific doubts will stimulate to check the information validity by comparing it with other sources, which is the first step towards good scientific knowledge. The author's words should not be accepted without supporting evidence. Various citations, bibliographies, or links to resources and scientific literature may be helpful in this case.

- Find more information about the web page author. Is he/she a reliable source? Sometimes internet sites provide this data, but more often, it needs to be sought for additionally. For this, the available URL can be checked for important clues. Shortening the URL by removing all characters after each slash (slash – /) going to the first one allows finding out who, a person, organization, or institution, is in charge of the site's work.

- Determine the purpose of web page creation. Its content may be presented for the purpose of advertising or to impose a particular point of view. If the motives for creating an internet resource are known, it is easier to judge the data posted.

- Conduct external and internal analysis of the page. Check the texts for grammar and writing. Pay attention to the date of the last update. Check if the links are working and how relevant they are. Special consideration should also be given to images. Their quality and quantity can help make a web page look more interesting, but, at the same time, may serve to draw attention to inaccurate information. Just as a magazine with many colorful advertisements may have a purpose distinctive from a scientific journal with no illustrations, so does a vibrant website may not be initially oriented towards research.

- Determine the resource coverage. Rate the depth of the material presented, the presence of links to documents and sources. It is often difficult to determine the scope of a topic's coverage from a web page. It may or may not contain links to other web pages or printed sources. Information on the web is often laid out for personal reasons and may contain deception or someone's personal opinion that is not scientifically confirmed.

DISCUSSION

The use of digital technologies in teaching history provides an opportunity to develop the skill of critical thinking, as students learn to perceive information, memorize and reproduce in a creative way (Dagdilelis, 2018). In addition, the understanding of history is formed not only at the level of text and memorization of dates of certain events, but is presented in a visualized form through drawings, photographs, videos, etc., which also increases students' interest and motivation to learn (Aidinopoulou & Sampson, 2017). An excellent example of a successful creation of a multi-faceted database resource aimed at encouraging a richer understanding of history is the Virginia Center for Digital History at the University of Virginia (VCDH). VCDH promotes the teaching and learning of history using digital technologies. Its research projects and popular science programs use the capabilities of the internet to serve scientists and educators in universities, colleges, schools, and libraries all around the world (Virginia Center for Digital History, n.d.). On the official website of VCDH, several projects on placing original digitized documents from various periods of American

history are being implemented simultaneously. For instance, The Valley Project details life in two American communities from the time of John Brown's raid to the era of Reconstruction. This digital archive contains thousands of original written sources: from letters and diaries to newspaper articles and church records.

Another dynamically developing digital platform related to historical studies is the Venice Time Machine Project. It is a pioneering international digital humanities program launched by the Swiss Federal Institute of Technology Lausanne and the University Ca'Foscari of Venice in 2012. Venice Time Machine Project embraces such Venetian institutions as the State Archive in Venice, the Marciana Library, the Instituto Veneto, and the Cini Foundation. The international board of the project includes scholars from Princeton, Stanford, Columbia, and London Universities, whereas the number of its participants account for already 300 researchers and students from different disciplines (Basic Sciences, Engineering, Computer Science, Architecture, History, and History of arts). As such, the project provides for the massive digitization of archival materials via automatic document processing and data visualization tools. It opens up great opportunities for reconstruction and study of the past as the resource developers devote special attention to the documents' transcribing and indexing (EPFL, 2020).

The largest library in the world, the Library of Congress, contains a digital collection of written sources and photographic materials widely used in the process of teaching history by numerous educators globally. The Library preserves and grants access to a diverse source of knowledge. Its collection of photographs, books, and other materials inspires an innumerable number of researchers and learners. In particular, its collection of 1891 photographs illustrating the daily life of Abdul Hamid II is frequently used by Russian students to visualize that remarkable period of time (Library of Congress, n.d.).

Today's world has accumulated considerable experience in the use of ICT to motivate students and improve their perception in the process of studying history. A great deal of attention is turned to the possibilities of augmented reality (AR). The modern approach to understanding AR regards it as a combination of the digital world with the physical one that broadens a person's real experience. Its advantages are numerous and encompass, first of all, greater learning autonomy and the ability to build an individual educational trajectory. However, although being an effective and quite popular educational method, using such a digital environment inevitably brings some challenges like emotional overload and the use of gameplay elements that may have a distracting effect. In view of this, many foreign authors call on the very cautious application of this technology when studying tragic pages in history (for example, the Holocaust) (Challenor & Ma, 2019).

In general, the problems and directions of the development of history education in Europe in the 21st century have attracted significant interest among the world research community. The main input in this field has come from four regional seminars held during 2016-2017 within the framework of the intergovernmental project *Educating for diversity and democracy: teaching history in contemporary Europe*. During these seminars, researchers expressed a shared opinion that developing critical historical thinking in the digital age is among the central areas of concern for now (Council of Europe, 2020).

The comparative analysis of world and Russian digital resources showed that the former were formed earlier, but they are based on a problem-oriented principle, which has increased their educational potential and simultaneously limited the research field to several problems (Ambrosio & Fidalgo, 2020; Congosto, 2018; Muntaner, 2015). In contrast, Russian historical portals are source-oriented. This gives broader opportunities for scientific research but requires the skills of academic research and the ability to work in a digital environment.

Notwithstanding the fact that digital history remains critical for historical research, it has received very little attention from professional historians and history educators. An analysis of the world and Russian experience of working with online history resources revealed the following gaps in this direction:

- Technological skills in the field of digital history are being developed too slowly by historians due to their ingrained habit of working by traditional research methods;
- Academic world lacks systematized catalogs of digital resources on history and effective methods for their search in the digital space;
- Experience of working with digital resources is being introduced too slowly into the process of teaching university students.

CONCLUSIONS

The results of the study showed that the study of history with the help of digital technologies provides an opportunity to develop and reflect on professional skills and competencies, including critical thinking, to increase students' motivation to learn. Taken together, it can be said that the practice of university and school education shows a steady course to the integration of ICT tools and historical science. Interdisciplinarity in the methodology of modern historical science demonstrates the emergence of such topical areas as historical information science and digital history, combining non-traditional technologies and research methods. The ongoing digital revolution facilitates the emergence of new historical research methods, tentatively called 'on-hand archival research'. The most optimal techniques and approaches to working with digital resources on history are:

- In the field of historical research – work with digital images and scanned copies of scientific papers posted on specialized portals;
- In the field of teaching and studying history – work with e-libraries and educational materials posted on the web.

The shift in scientific emphasis towards an increasing concern with the value of the visible encouraged creating a fertile ground for the development of digital history. Analysis of the most popular digital history resources showed that they indeed can be effectively used for teaching. Nevertheless, the digital environment of the modern Russian Federation is not yet ready for carrying out full-scale historical research remotely.

The examination of the experience of using digital history resources revealed that the obvious advantage of data provided online lies in the ability to access it quickly. Historians gained the possibility of working with various types of sources, as well as to collect, encode, analyze, and interpret scientific information without moving away from the computer screen and leaving home. As a result, nowadays, more and more dynamic digital platforms are created, supplemented, and updated by scientific sources and discussion materials.

The conducted investigation showed that the main difference between Russian and foreign digital history resources is that the first are rather source-oriented, and the latter are based on a problem-centered principle. In any case, the extensive digitalization running these days gives a powerful impetus to the transition to an integrated approach focused on creating thematic digital portals that include multidimensional collections of sources.

The main provisions of the present article are of theoretical and applied importance for all studying history and conducting historical research. The paper is addressed to a broad interdisciplinary audience, including cultural heritage professionals, IT professionals, and researchers in the humanities and social sciences. The obtained findings and conclusions can be used for teaching Russian and foreign university students in bachelor's and master's programs in history.

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