UDC 929:37]:001.92:004.77

Larysa D. Berezivska
Doctor of Pedagogical Sciences, Professor, Corresponding Member of the National Academy of Educational Sciences of Ukraine, Director of V. O. Sukhomlynskyi State Scientific and Educational Library of Ukraine, Kyiv, Ukraine
ORCID ID 0000-0002-5068-5234
lberezivska@ukr.net

Oleksandr P. Mikhno
Doctor of Pedagogical Sciences, Senior Researcher, Director
Pedagogical Museum of Ukraine, Kyiv, Ukraine
Leading Researcher of the Department of Pedagogical Source Studies and Biographistics
V. O. Sukhomlynskyi State Scientific and Educational Library of Ukraine, Kyiv, Ukraine
ORCID ID*:* 0000-0002-5271-9530
amihno@ukr.net,

Olha P. Pinchuk
Candidate of Pedagogical Sciences, Senior Researcher,
Deputy Director for Scientific and Experimental Work
Institute for Digitalisation of Education of the NAES of Ukraine of the National Academy of Educational Sciences of Ukraine, Kyiv, Ukraine;
Leading Researcher of the Department of Digital Technologies and Computer Support
V. O. Sukhomlynskyi State Scientific and Educational Library of Ukraine, Kyiv, Ukraine
ORCID ID 0000-0002-2770-0838
opinchuk@iitlt.gov.ua

ONLINE PROJECTS AS A FORM OF SPREADING PEDAGOGICAL BIOGRAPHICAL KNOWLEDGE IN THE CONTEXT OF OPEN SCIENCE

Abstract. The article deals with the relevant issue of using social media in the context of open science to disseminate the results of scientific research and implement the mission of institutions of social memory – libraries and museums – to preserve, study and popularize the national pedagogical heritage. It has been revealedthat in foreign and Ukrainian historiography there are no special studies on the spread of biographical knowledge in social networks. The online project is considered both as a multifunctional information resource and as a digital tool for educational activities, which, with the help of web technologies, demonstrates specially created open-access content to a wide range of users. For the first time, the paper analyzes the spread of biographical pedagogical knowledge through the development of online projects and their implementation by means of social networks. Biographical online projects of V. O. Sukhomlynskyi State Scientific and Educational Library of the National Academy of Educational Sciences of Ukraine and the Pedagogical Museum of Ukraine are characterized by the following parameters: systematized information in the form of a table (implementation model, name, web resource where the project was implemented, implementation period, hashtag), grouping by type (collective, individual, calendar, thematic), a brief description of the content of each project, a graphic layout of the project. The examples of biographical online projects have been given. The article reveals thetrend of an increase in the number of biographical online projects in the Ukrainian segment of the Facebook social network during 2020–2022, caused by the decolonization of the Ukrainian humanities. 4 proven models for implementing biographical online projects have been proposed for a widespread use: "Online project on Facebook", "Online project on Facebook and Instagram", Online project on Facebook using a web portal/website", Online project on Facebook as a source ofvirtual exhibition on the website". It has been proven that the use of social networks for the dissemination of pedagogical biography in the form of online projects in the educational and scientific space is not only an effective way of providing access to the results of scientific research to a wide audience, but it also contributes to the restoration and preservation of the national memory.

©L.D. Berezivska, O.P.Mikhno, O.P. Pinchuk, 2023.

Keywords: open science; pedagogical biography; online project; social networks; V. O. Sukhomlynskyi State Scientific and Educational Library of Ukraine; Pedagogical Museum of Ukraine.

1. INTRODUCTION

Statement of the problem. As Ukraine's national education system is developing as a component of the European and world educational and scientific space, the public demand for historical and biographical information is becoming more relevant, the need for in-depth knowledge about the life and activities, views and worldview values of teachers and educators of the past is growing, new incentives are being formed for the spread of democratic and humanistic ideas about the development of the Ukrainian education. The use of pedagogical biographical knowledge in the educational process acquires the potential of strengthening fellow citizens' national identification and the consolidation of society.

Digital humanities have fundamentally changed traditional ideas about the nature and content of biographical information. Its feature, in comparison with the traditional biography of the "pre-digital" period, was the transition from detailed individual biographies to the arrays of reference biographical data, mostly concise in scope, about a huge number of people. Approaches to the collection, processing and revealing of biographical information have changed too.

V. O. Sukhomlynskyi State Scientific and Educational Library of the National Academy of Educational Sciences of Ukraine (hereinafter –SSEL) and the Pedagogical Museum of Ukraine (hereinafter – PM) pay great attention to the study and popularization of the achievements of educators, educational and public figures of the past, striving to make available the information about their lives, activity and creative heritage not only in traditional, but also in digital form. There is an intensification of remote forms of education due to the challenges of the crisis events related to the COVID-19 pandemic and the war in Ukraine. The activity of the SSEL and PM in dissemination of biographical knowledge among a wide range of educators, education seekers for the sake of preserving national memory and self-identification of society has undergone a digital transformation, in particular in the creation and development of biographical online projects *(online project).*

Open science establishes a new paradigm of human activity in the educational and scientific space, namely: scientific activity includes methods of increasing the level of reproducibility, transparency, information exchange and cooperation based on the expansion of open access to scientific materials, tools and processes. The very term "open science" [1] means a framework concept that combines various forms of activity aimed at making scientific knowledge in various languages open, publicly available and suitable for common multiple use, expanding scientific cooperation and information exchange for the benefit of science and society and at opening the processes of creation, evaluation and dissemination of scientific knowledge for social subjects who are not part of the traditional scientific community. Open scientific knowledge involves open access (or copyrighted and published under an open license) to scientific publications, research data, metadata, open educational resources, software, source codes and hardware, which, in particular, allows reuse, change of the target use, adaptation and distribution under certain conditions.

Given the topic of our research, the key idea is to provide users with the opportunity to get free access to reliable information, biographical materials (scientific publications, open research data, open educational resources, etc.)

The principles of open science can be implemented with the help of social networks. Thus,

the posting (publication) of *open data* in social networks can stimulate new research and/or initiate additional analytical procedures by other scientists. Social networks can be a *tool for open access* to scientific resources, used to publicize the results of scientific research and articles, allowing others to find and share these resources easily. The OECD defines social networks as a platform that enables scientists to reach a wider audience than the academic community [2].

In the European space, the vision of the global open science is realized through an ambitious program – the European Open Science Cloud (*European Open Science Cloud, 2018*). The European open science cloud is systematically filled with new services to support the implementation of the concept of open science in the European space [3], [4].

The concept of open access became fundamental for the emergence of a number of projects actualized in the paradigm of open science. In addition to open access scientific journals, new types of platforms for the distribution of scientific information (data) have appeared: open archives, libraries and repositories, specialized social networks, databases and scientometric services, which are gradually forming an alternative infrastructure of scientific communication [5].

An online project is developed and executed on the Internet, that is, it uses Internet technologies to collect data, interact with users, collaborate with the project team, and organize feedback. In a broad sense, it can be an online course, a web application, a website, online games, a video blog or any other project based on Internet technologies. Online projects can be created for different target audiences and have different functionality. They give the possibility to collect more data about users and their behavior, which, in turn, helps to improve and adapt projects to the needs of the target audience.

We understand a pedagogical online biographical project as the use of Internet technologies for creation of a dynamic web resource that contains descriptions of the educator's life path, his/her professional achievements, creativity, activities in the educational field and the impact on students and the educational community. The web resource can include interactive elements, such as photos, videos and audio recordings, which help to better understand the educator’s life path and his or her approach to teaching. The online project as a form of dissemination of pedagogical biography can be useful for other educators, students, researchers and all those interested in education. It gives the possibility to gain insights about the experience of successful educators and use their knowledge and approaches in one’s own practice.

Analysis of recent research and publications. The historiographic study of the problem shows that theoretical and methodological issues of biographical studies have been thoroughly and multifacetedly researched by the scientists of the Institute of Biographical Research of the National Library of Ukraine named after V.I. Vernadskyi (G. Aleksandrova, O. Bugayeva, L. Buryak, Yu. Vernik, N. Marchenko, N. Lyubovets, V. Popyk, etc.), in particular, the issue of functioning of biographical knowledge in the Ukrainian society, problems and prospective tasks of libraries as leading centers of integration, processing and distribution of printed and electronic resources of biographical and biobibliographical information, etc. Ukrainian scientists L. Berezivska [6], [7], O. Mikhno [8], I. Rozman [9] and others highlight the sources and practically applied problems of pedagogical biographical research. The use of electronic social networks in education is disclosed in the works by S. Lytvynova [10] and O. Pinchuk [11].

Foreign scientists look into various aspects of biographical research. R. Hawkins, K.F. Al-Hindi, P. Moss & L. Kern consider collective biography as an original way of generating new knowledge [12]. M. Lozano, M.M. Toraya, D. Montaña & R.P. Sandoval use biographical narratives as a tool in the study of transformations in post-conflict societies [13]. J. Hamann & W. Kaltenbrunner reveal the evolution of Curricula vitae (CV) as biographical representations, tracing their various morphological changes/morphological shifts [14]. R. Breckner& E. Mayer analyze

images on Facebook and Instagram, demonstrating how these images relate to a biographical narrative and become biographically relevant [15].

G. Guazzaroni[16], R. Hassan [17], I. Pop and A. Borza [18], M. Shehade and T. Stylianou-Lambert [19] substantiate the importance of using digital technologies in the work of museums and libraries, substantiate several provisions regarding online activities in general and online projects in particular. Online projects attract new audience, primarily young people; they are a powerful tool for conveying emotions; they do not offer innovative things but satisfy the actual needs of the audience; they are not an alternative to an offline visit, but they allow the online visitor to experience something he/she would never have access to in any other way. It is fundamental that online projects are implemented within the mission of the museum and library, and not as a separate individual proposal [16–19].

Biographical knowledge is also spread in the foreign segment of the Facebook social network in the form of online projects, which are a Facebook page itself, which does not contain any content other than biographical articles. These are, for example, the pages "Dictionary of Canadian Biography" (https://www.facebook.com/dictionaryofcanadianbiography, created in 2019) and "Biographical Dictionary of Georgia" (https://www.facebook.com/biosge/, created in 2015) that publish concise biographies with reference to full texts posted on the websites of electronic biographical dictionaries of Canada (http://www.biographi.ca/en/index.php, developed by the University of Toronto) and Georgia (http ://www.nplg.gov.ge/bios/en/, developed by the National Parliamentary Library of Georgia). The extremely popular page "Biography" (https://www.facebook.com/Biography, created in 2010) on Facebook (more than 500,000 subscribers) operates according to a similar algorithm, where annotated biographical texts about historical figures and contemporaries are published, in particular stars of show business and sports/Celebrities, with a link to the full versions of the articles on the website https://www.biography.com/ (the owner of the content is the media conglomerate Hearst Communications).

In the context of our research, it is worth mentioning the virtual biographical dictionaries: Deutsche Biographie (https://www.deutsche-biographie.de/home, more than 50 thousand biographical articles), Oxford Dictionary of National Biography (https://www.oxforddnb. com, over 60 thousand articles), Ireland's national biographical dictionary (https://www.dib.ie/, over 11 thousand articles), Slovenian biographical lexicon (https://www.slovenska-biografija.si/, over 3 thousand articles) etc. Since all these web resources have a convenient and well-thought-out interface, you can also find teachers' biographies in them in the "Search" mode. There is currently one online biographical dictionary of teachers in the global Internet space, which was created by Italian scientists – Dizionario Biografico dell'Educazione (DBE) / Biographical Dictionary of Education http://dbe.editricebibliografica.it/dbe/ricerche.html, which contains 2345 biographical articles. Unfortunately, these virtual products have not been spread in social networks.

Foreign researchers D. Agostino, M. Arnaboldi & A. Lampis [20], C. Camarero, M.-J. Garrido & R. San Jose [21], E. T. H. Lam, C. H. Au & D. K. Chiu [22] and others highlight the growth of online activity of museums and libraries in social networks.

It should be noted that researchers, in particular Ch. Heise (Christian Heise) and J. M. Pearce (Joshua M. Pearce), note the existence of difficulties and obstacles on the way to the implementation of open science in broad practice [23]. There are many features showing how the system of organizing the scientific and educational process is changing today. It is changing in a way that researchers, teachers and students receive additional benefits through the implementation of an open scientific environment. The implementation of the principles of open education and science is a thorough, deep process that affects many spheres of life in society (political institutions,

the university sector, publishing centers, research institutions, etc.) and requires significant time, intellectual, and organizational investments [24], [25].

However, we should note that there are currently no special studies on the specifics of the spread of pedagogical biographical knowledge using social networks in either foreign or Ukrainian historiography.

The purpose of the article is to reveal the informational potential of online projects as a form of dissemination of pedagogical biographical knowledge in the educational and scientific space in order to preserve the national memory of Ukrainian society. **The task** is to analyze the subject, information content, approaches to creating and providing access, volumes of online biographical projects of the SSEL and PM; to reveal common and distinctive features of the online biographical projects of the SSEL and PM, also comparing them with similar virtual products in Ukraine and the world; to actualize the importance of online projects as a form of dissemination of biographical knowledge in the educational and scientific space in the context of open science in order to preserve national memory in the conditions of the russian-Ukrainian war.

2. RESEARCH METHODOLOGY

Theoretical and empirical research methods were used to realize the outlined goal: analysis of normative documents, identification of key concepts, study of practical experience; methods of comparative and statistical analysis; historiographic, biographical, bibliographic, source studies and interdisciplinary approaches, as well as historical and systemic approaches (analysis and modeling are meant here); monitoring the attendance of biographical online projects in the Ukrainian segment of electronic social networks; analysis of quantitative characteristics (like/dislike content); comparing the studied phenomena and establishing their similarities/differences in the domestic and foreign segments; a survey of library specialists regarding the improvement of graphic layouts, the systematicity/periodicity of their filling with relevant content.

In order to establish the common and distinctive features of the Ukrainian and foreign online projects and to identify their features, we compare them using the following indicators: name, access link, institution/establishment-developer of the online project, content, convenience of the interface, convenience of search, open access/access by subscription, the number of informative posts, etc.

3. RESEARCH RESULTS

At the SSEL, as a scientific institution, biographical online projects are a form of dissemination and implementation of the scientific research "Pedagogical science and education in persons, documents, bibliography" (2020–2022), "Pedagogical biography in the information, educational and scientific space of Ukraine" (2023–2025), supervised by L. Berezivska. Such approach is a vivid example of providing open access to research data to a wide range of educators and scholars. At the same time, it helps attract remote Ukrainian and foreign users to the information resources presented on the SSEL web portal (https://dnpb.gov.ua/ua/).

The PM has a strategy of online activity (since 2019), which is based, first of all, on systematic work on the digitization of the museum funds [8]. An important result of this activity is a variety of online projects that have two interrelated tasks: 1) maintaining the audience and public interest (for this, the museum uses social networks and the official website), 2) expanding the museum's cultural, educational and other services, which are provided online and, as a result, attract

new audience. The increase in the number of the museum's services takes place through the creation of new online projects.

The SSEL and PM implement biographical online projects in social networks according to four models.

Model 1. Online project on Facebook (*Online project on Facebook, OP:FB*). This is the most common model of implementing an online project, which involves regular posting of biographical posts on the Facebook social network in the format of a condensed text and a graphic layout of the project.

Model 2. Online project on Facebook and Instagram*(Online project on Facebook and Instagram, OP:FB+IG*). According to this model, project posts are placed simultaneously in two social networks, which increases the audience reach. Since Instagram is a network based on the exchange of photos and primarily aimed at young people, the main content of the project based on the OP:FB+IG model is a graphic layout of a special size and format and the shortest possible text content (the text of an Instagram post cannot contain more than 2,200 characters). Posting in this model is done using the Meta Business Suite tool, which is designed to manage one's presence on Facebook and Instagram.

Model 3. Online project on Facebook using a web portal/website (*Online project on Facebook using a web portal/website, OP:WWW:FB*). In this model, the web portal/website acts as an aggregator of a certain set of thematic biographical publications in the social network. The model is used when the task of the online project is familiarizing with the teachers' full-text works and electronic copies of pedagogical publications. Since social networks do not provide for the distribution of full-text documents, project posts contain links to relevant materials posted on the web portal/website.

Model 4. Online project on Facebook as a source of virtual exhibition on the website *(Online project on Facebook as a source of virtual exhibition on the website*, OP:FB:WWW). The model makes it possible to systematize all the posts of the online project after the completion of its implementation in the social network in the format of a virtual exhibition on the website of the project developer institution and in this way to present the entire content of the project holistically, to provide statistics on the coverage of individual publications and the entire project using social network statistics tools, to summarize the results of the implementation project, to determine its weaknesses and strengths in order to improve further online projects.

In Table 1 we have systematized the online projects of the SSEL and PM, which enables a holistic view of their subject matter, location and implementation model.

Table 1

Biographical online projects of the SSEL and PM

Developer	Name	Web resources	Implementation period	Hashtag
Model 1. OP:FB				
SSEL	Let's read Sukhomlynskyi online	Facebook	2020-2022	#Читаймо_Сухомлинського_онлайн #Let's read Sukhomlynskyi online
SSEL	Sukhomlinsky News	Facebook	Since 2020, ongoing	#SukhomlinskyNews #support_for_ukraine
SSEL	Fairy-tales by V. Sukhomlynskyi in O.	Facebook	2021	#Казки_Сухомлинського #Fairy-tales by V. Sukhomlynskyi

	Savchenko's textbooks			
SSEL	A child is a part of nature	Facebook	2022	#Дитина_частина_природи #A child is a part of nature
SSEL	Calendar of significant and memorable dates in the field of education and pedagogical science	Facebook	Since 2012, ongoing	#календар_у_галузі_освіти #calendar in the field of education
PM	Pedagogical map of Kyiv	Facebook	Since 2022, ongoing	#Педагогічна_мапа_Києва #Pedagogical map of Kyiv
SSEL PM	Aphorisms of Sukhomlynskyi	Facebook	2021-2022	#АфоризмиСухомлинського #Aphorisms of Sukhomlynskyi
Model 2. OP:FB+IG				
PM	Pedagogical calendar	Facebook Instagram	Since 2019, ongoing	#ПедагогічнийКадендар2023 #Pedagogical Calendar2023
PM	Sukhomlynskyi among the stars	Facebook Instagram	Since 2020, ongoing	#Сухомлинський_серед_зірок #Sukhomlynskyi among the stars
Model 3. OP:WWW:FB				
SSEL	We are standing on the shoulders of our predecessors: outstanding pedagogues-jubilarians	Web portal Facebook	Since 2020, ongoing	#Педагоги_ювіляри #Pedagogues-jubilarians
SSEL	Educators of Ukraine: we remember, we honor!	Web portal Facebook	Since 2022, ongoing	#педагоги_України #Educators of Ukraine
PM	Skovoroda300	Website Facebook	2022	#Сковорода300+#Книжковий_Фронт #Skovoroda 300 + #Book Front
PM	Borys Grinchenko160	Website Facebook	2023	#БорисГрінченко160 #Borys Grinchenko160
Model 4. OP:FB:WWW				
PM	Academicians-founders (to the 30th anniversary of the National Academy of Educational Sciences of Ukraine)	Facebook Website	2022	#Академіки_засновники #Academicians-founders
PM	Lessons of the war	Facebook Website	Since 2022, ongoing	#Уроки_війни+#Освітяни_в_ЗСУ #Lessons of the war +#Educators in AFU

According to the first model, projects *dedicated to individual figures* are implemented, which *briefly present biographical knowledge in the educational and scientific space*, contribute to the spread of humanistic ideas and worldview values of outstanding educators.

Thus, since 2020, the SSEL has been implementing online projects to spread the ideas of the outstanding Ukrainian pedagogue-humanist Vasyl Sukhomlynskyi (1918-1970): "Let's read Sukhomlynskyi online", "Aphorisms of Sukhomlynskyi" (together with the Pedagogical Museum of Ukraine and the Pavlysh Pedagogical and Memorial Museum of V. O. Sukhomlynskyi), "Fairy-tales by V. O. Sukhomlynskyi in O. Ya. Savchenko's textbooks and manuals", "Sukhomlinsky News". We will characterize them in brief.

The project "Let's read Sukhomlynskyi online" is implemented on Facebook by posting weekly posts. According to the concept, the post should contain brief information about the project and a call to study the teacher's works by downloading them from the "Scientific and Pedagogical Electronic Library". Next, the name of the specific work by V. Sukhomlynskyi and the link for its downloading are provided. The project presents little-known, as a rule, newspaper publications of the teacher from the 1950s and 1960s. Finally, in the comments to the post, the user is invited to leave his/her thoughts on what they read and the teacher's quotes that impressed them most. In addition to textual information, appropriate and necessary visual material for the social network is provided – a graphic layout that contains information about the organizers of the project, a photo of the teacher, a bibliographic description of his specific work and a link for downloading (Fig. 1). According to Facebook statistics, during the implementation of the online project "Let's read Sukhomlynskyi online" in 2021-2022 the posts reached 16,317 people, the rate of involvement was 2,359 people.

a) original *b) schematic representation*

Fig. 1. Graphic layout of the online project "Let's read Sukhomlynskyi online"

The online project "Sukhomlinsky News" is implemented on the official page of the SSEL on Facebook through monthly informative posts with a visual image of a fragment of the "Sukhomlinsky News" bulletin (Fig. 2). This bulletin has been prepared since 2015 by Alan Cockerill, an Australian scholar and promoter of Vasyl Sukhomlynskyi's legacy. Thanks to his efforts, the legacy of the Ukrainian teacher becomes accessible to English-speaking readers, and all the materials in the bulletin are translated into English for the first time. The Facebook post contains a Ukrainian translation of A. Cockerill's address to the readers and it briefly tells about the structure of the next issue of the bulletin, which consists of a translation into English of a scientific and pedagogical work by V. Sukhomlynskyi and several of his literary miniatures, illustrated with children's drawings. At the end, there is a link for downloading the original issue of the bulletin in English. According to Facebook statistics, in 2022 the project posts reached 3,211 people, and 764 people were involved (likes, comments and shares).

a) original *b) schematic representation*

Fig. 2. Graphic layout of the online project "Sukhomlinsky News"

A special feature of the online project "Aphorisms of Sukhomlynskyi" is that it was implemented in 2020-2021 (54 posts) as a result of the creative cooperation of institutions that preserve and research Vasyl Sukhomlynskyi's legacy: the Pedagogical Memorial Museum of V.O. Sukhomlynskyi, PM and SSEL. The project was extremely popular among Facebook users, which can be explained by several factors. First, the project was developed taking into account the algorithms of the social network, which require the presentation of a short text and mandatory visualization. In this way, the organizers of the project acted according to the following concept: a minimum of textual information and a maximum of visualization, which is embodied in a combination of colors, readable font and rare photos. Secondly, in this online project, for the first time, an interesting and, in our opinion, extremely successful and promising principle of combining textual and visual information is applied: the graphic layout contains the logos of the PM and SSEL, a teacher's aphorism, a rare photo from the funds of the Pedagogical Memorial Museum of V.O. Sukhomlynskyi with the corresponding signature and the hashtag #Aphorisms of Sukhomlynskyi, by which it is easy to search for the desired posts in the social network (Fig. 3). The synthesis of a photo and a short text captures the interest of the Facebook user, and the material is easy to remember. Thirdly, the posts of the project were shared simultaneously on three official pages of the organizers.

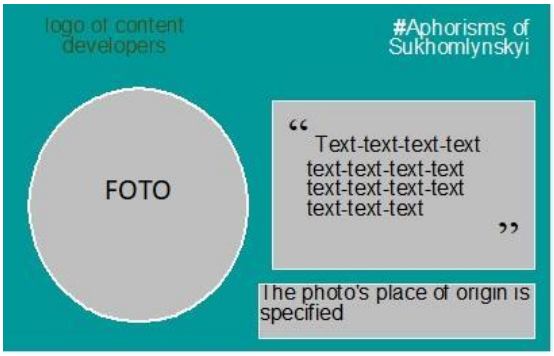


Fig. 3. Graphic layout of the online project "Aphorisms of Sukhomlynskyi"

Another interesting project is the online project of the SSEL "Fairy-tales by V. O. Sukhomlynskyi in O. Ya. Savchenko's textbooks and manuals", implemented in 2021 (12 posts), which at the same time presents the literary work of V. O. Sukhomlynskyi and its implementation

in modern educational practice through the prism of the creative work of the prominent Ukrainian scholar, specialist in the field of primary education O. Ya. Savchenko (1942–2020), author and compiler of textbooks, manuals and reading books for primary education. Once a month, the project publishes on the SSEL Facebook page fairy-tales by V. O. Sukhomlynskyi, selected and included by O. Ya. Savchenko in one of her educational books. Fairy tales are illustrated with children's drawings. According to Facebook statistics, in 2021 the project posts reached 4,721 people, the rate of involvement was 1,230 people.

In 2022, the SSEL online project on the Facebook network "A child is a part of nature" (based on the fairy-tales and stories by V. O. Sukhomlynskyi) was updated and partially changed in accordance with the challenges that arose as a result of russia's full-scale war against Ukraine. The artistic and literary works by V. O. Sukhomlynskyi about the Second World War, the events of which resonate with today's new history of Ukraine, were used. According to Facebook statistics, during the implementation of the online project in 2022, the posts reached 5115 people, 984 people were involved.

A special type of online projects worth attention deals with *calendars*: "Calendar of significant and memorable dates in the field of education and pedagogical science" of the SSEL (launched in 2012) and "Pedagogical calendar" of the PM (launched in 2019), which are also being implemented according to Model 1. These monthly online projects in the Facebook social network present visualized factual information about the anniversary dates of famous figures of education and culture of the past and present (Figs. 4, 5). The calendar as a source of competent information in the educational process and information activity is widely used by pedagogical and scientific-pedagogical workers, library workers and education seekers.

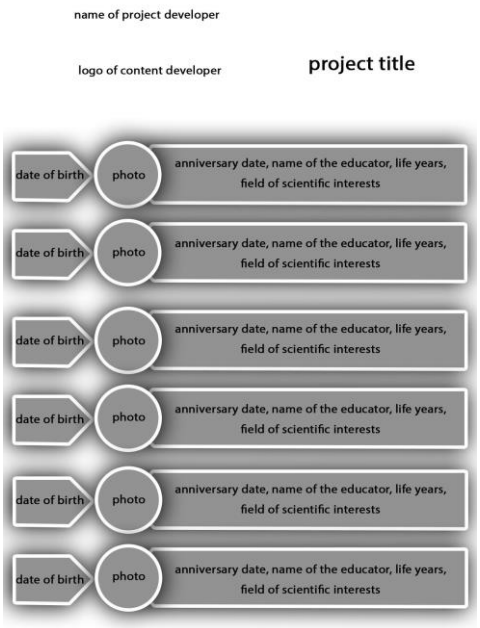


Fig. 4. Graphic layout of the online project "Calendar of Significant and Memorable Dates in the Field of Education and Pedagogical Science" SSEL

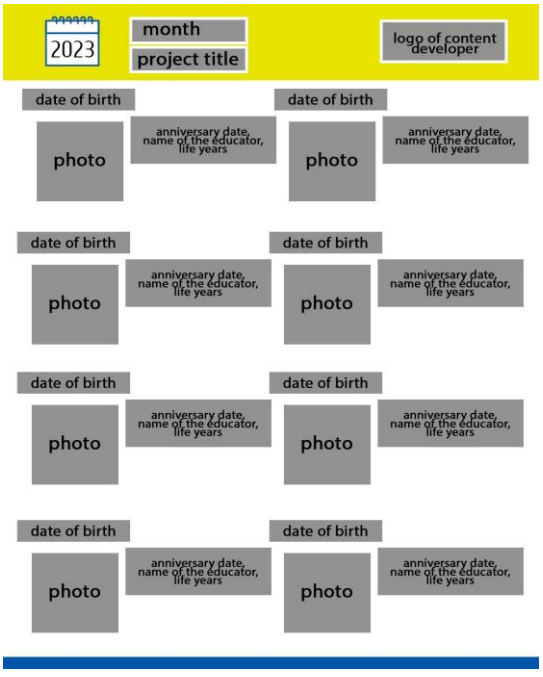


Fig. 5. Graphic layout of the online project "Pedagogical Calendar" of the PM

The original online project "Pedagogical map of Kyiv" of PM (launched in 2022) presents Kyiv locations dedicated to teachers and cultural and educational figures, tells about the tribute to their memory in the urban space of Kyiv. Today, Kyiv has more than 2,000 streets, 500 alleys, 59 squares and plazas. The online project will help to establish how many of them are dedicated to teachers. The final result will be the creation of an interactive "Pedagogical Map of Kyiv" on the museum's website. The project is implemented on the Facebook pages of the museum, with two publications per month. Each post contains brief biographical information about the teacher, whose name is borne by a location in Kyiv, and at the end of the post a link to the teacher's more detailed biography is provided. The graphic layout of the project contains a schematic map of Kyiv, a location mark on the map and its description, a portrait of the teacher under consideration. According to Facebook statistics, during the implementation of the project in 2022, posts reached 65,388 people, the rate of involvement was 3,401 people.

The online project "From the history of the Pedagogical Museum: people, activities, exhibits, building", launched this year, aims to demonstrate the most important facts and events over the more than 120-year history of the museum, and the personalities who created the museum. The first post of the project is dedicated to the first director of the museum – the Ukrainian educator Oleksandr Muzychenko. Articles about other directors of the museum – Volodymyr Naumenko, Leonid Dobrovolskyi, Oleksandr Hrushevskyi, etc. are planned.

According to the second model, two online PM projects are implemented. The online project "Pedagogical Calendar" is dedicated to jubilee teachers. During 2019–2022, more than 300 posts on the anniversaries of Ukrainian and foreign teachers were published on Facebook and Instagram social networks, as well as on the museum website. The main element of this project is its graphic layout, which includes the museum logo, a photo of the jubilee teacher and brief information: the teacher's name and surname, years of life and anniversary date (Fig. 6). In the condensed text, which is attached to the graphic layout, there is more detailed information about the biography of the teacher and his/her contribution to the development of education [26].

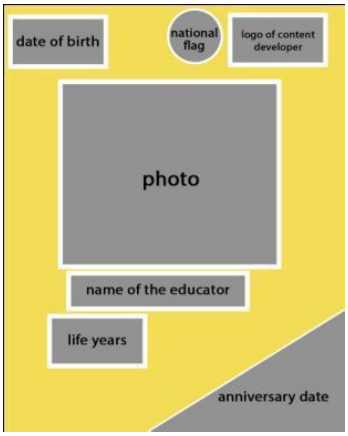


Fig. 6. Graphic layout of the online project "Pedagogical calendar"

The PM also implements online projects dedicated to the outstanding Ukrainian teacher V. Sukhomlynskyi. Thus, in 2021, the online project "Sukhomlynskyi among the stars" was launched, in which the children's works by V. Sukhomlynskyi are read by Ukrainian sport celebrities. Posts on Facebook and Instagram contain a photo of the athlete, brief information about him/her, a list of voiced works, and a link for listening to V. Sukhomlynskyi's fairy-tales. Currently, the project is ongoing [27].

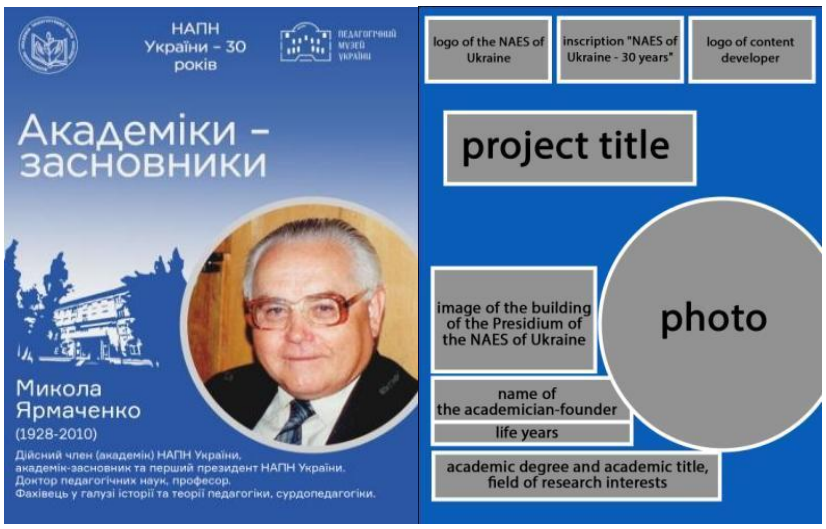
The SSEL implements *two collective online projects that systematically present brief biographical information about Ukrainian and foreign educational figures.* The purpose of such projects is to recreate or reconstruct, using online technologies, a collective portrait of teachers from different eras and contexts. These projects are implemented according to the third model, which involves the use of the web portal or website of the institution as an aggregator of project posts in the social network.

Two online projects are being implemented on the basis of the SSEL electronic resource "Outstanding Educators of Ukraine and the World" (https://cutt.ly/g3nSvpJ), integrating information on 82 Ukrainian and foreign educators: "We are standing on the shoulders of our predecessors: Outstanding Teachers-jubilarians" and "Educators of Ukraine: we remember, we honor!". The first of them presents the full-text works of Ukrainian and foreign pedagogues-jubilarians to a wide audience of educators and scholars for review and discussion. The second one every month introduces the pages of the electronic resource that combine biographical and bibliographic information about personalities [7]. According to Facebook statistics, during the implementation of the online project "We are standing on the shoulders of our predecessors: Outstanding pedagogues-jubilarians" in 2022 the posts reached 4,228 people and 1,002 people were involved, and during the implementation of the online project "Educators of Ukraine: we remember, we honor!" 12,650 people were reached by the posts and 2,251 people were involved.

The PM uses model 3 in online projects dedicated to individual figures. In 2022, for the 300th anniversary of Hryhorii Skovoroda, the PM implemented the online project "Skovoroda300", featuring Skovoroda as a teacher: 10 posts with covers, annotations and links were published on Facebook and the museum website, with electronic copies of 10 books published in the 1940s-1970s (the works of H. Skovoroda and works about him), which are stored in the museum's collections. The project was very popular among Facebook users, and thanks to the cooperation, a post about H. Skovoroda was created and distributed on the page of the State Agency of Ukraine for Arts and Art Education: (http://surl.li/edmfq). According to Facebook statistics, the total reach by the posts amounts to 86,791 people, and the involvement amounts to 4,770 people.

As part of the online project "Borys Grinchenko160", the PM will present 12 electronic copies of B. Grinchenko's children's works throughout 2023. Each post contains the book cover, a brief description of its content, and a link to an electronic copy of the publication on the museum's website.

The fourth model was used in 2 online PM projects. In 2022, to the 30th anniversary of the National Academy of Educational Sciences of Ukraine, the PM implemented the project "Academicians–founders". During the year, 15 posts were published on Facebook about Ukrainian scholars–founders of the National Academy of Educational Sciences of Ukraine. Each post contained an informative graphic layout with the following elements: logos of the National Academy of Educational Sciences of Ukraine and the PM, the inscription "National Academy of Educational Sciences of Ukraine – 30 years", an image of the premises of the Presidium of the National Academy of Educational Sciences of Ukraine, name and surname, a portrait photo of the academician-founder, years of his life, scientific degree and academic title, as well as the field of scholarly interests (Fig. 7). The text about the founding of the National Academy of Educational Sciences of Ukraine on March 4, 1992 and the link by which the reader can learn more about the biography of the academician-founder were added to the graphic layout. According to Facebook statistics, the total reach by the project posts is 40,023 people, and the involvement is 2,506 people. Currently, all posts of the project are presented in the form of a virtual exhibition "Academicians–founders" on the museum's website: https://cutt.ly/yJ3sQLS.



a) original *b) schematic representation*

Fig. 7. Graphic layout of the online project "Academicians-founders"

Since the beginning of the hot phase of the russian-Ukrainian war, the PM has been implementing the online project "Lessons of the War", which reflects the impact of the war on the educational process in Ukraine and documents the terrorist actions of russia against the civilian population of Ukraine. One of the sections of the project, "Educators in the Armed Forces", is dedicated to teachers, lecturers of higher educational institutions, scientists who joined the Armed Forces of Ukraine and are defending the independence of our country. The post of the project on Facebook contains a graphic layout with the name of the project and a photo of the educator, a brief biographical reference about him and a link to the source of information: https://cutt.ly/e3HbwQp. Project posts are systematized on the museum website in the virtual exhibition "Lessons of War" (education of Ukraine during the russian-Ukrainian war): http://pmu.in.ua/actual-info/lessons-of-war/. According to Facebook statistics, in 2022 the project posts reached 62,512 people, and 3,612 people were involved (likes, comments and shares).

The online biographical projects of the SSEL and PM are a vivid example of open cooperation between a scientific institution and a cultural institution for the purpose of spreading pedagogical biographical knowledge in the educational and scientific space and preserving the national memory of the Ukrainian society. The following types are distinguished among them: individual projects which are dedicated to one personality, collective projects, reflecting a collective portrait of educators and thematic projects which are realized through the prism of biographies. The approaches to creating projects are similar: they are implemented mainly on the Facebook social network with links to the web portals of institutions; they provide access to electronic resources, in particular digital copies of the works of Ukrainian and foreign teachers, contain visualized factual information. Depending on the purpose and topic of the project, one of the 4 developed models is chosen for its implementation.

Other establishments, educational and cultural institutions also disseminate biographical information in the Ukrainian information space. Letus give some examples. Since 2015, the Institute of Encyclopedic Research of the National Academy of Sciences of Ukraine has been posting daily publications on the date of birth or death of Ukrainian scientists, artists, athletes, and statesmen on the Facebook page in the following format: a portrait photo and a link to a

biographical article in the electronic "Encyclopedia of Modern Ukraine" https://cutt.ly/y3ojkcc. The Central State Archive-Museum of Literature and Art of Ukraine implements three interesting online biographical projects on Facebook: "ARKHIVazhlyva SPRAVA (ARCHIVE important MATTER)" (since 2016; https://cutt.ly/M3aBRT0), "Archive-Museum to help teachers" (since 2018; https://cutt.ly/z3E1Tdi), "Ukraine. To know is to win!" (since 2022; https://cutt.ly/M3E1Pyw). The posts of the projects are published before the personality's birthday and contain a detailed biographical reference and a photo of archival documents of the personal fund stored in the institution. Starting from 2022, the State Agency of Ukraine on Arts and Art Education regularly publishes biographical posts on the anniversaries of Ukrainian artists on its Facebook page: https://cutt.ly/m3oxaES. Since 2021, the All-Ukrainian newspaper and online publication "Ukrainian Interest" has been running the "Lyudyna" online project on Facebook, publishing a graphic layout with a portrait photo and a short text indicating the name, years of life and type of activity for the personality's birthday: https://cutt.ly/Z3ohqKs.

A new and, unfortunately, tragic content appeared among biographical online projects launched on Facebook in 2023 to commemorate the fallen defenders of Ukraine and civilians who fell victim of russia's armed aggression against Ukraine: "russia kills" (developer – Ukrainian Institute of National Memory: https://cutt.ly/i3GM9Tg) "Minute of Silence" (posts of the Donetsk Regional Local History Museum: https://cutt.ly/w3ocXaN), "Memorial of Heroes" (developer – media platform "Memorial of Heroes": https://cutt.ly/a3ovTDj). The format of online projects of the National Library of Ukraine for children is special – videos posted on YouTube: "Great Creators" https://cutt.ly/P3YK390, "Great Ukrainians" https://cutt.ly/H3YLrO4, "Works and Creators" https://cutt.ly/C3YLpUu (all the projects are for 2022).

The specified biographical online projects belong to collective projects, which associate them with similar projects of the SSEL and PM. The common feature is the use of graphic layouts for visualizing factual information, as well as open access to the posts. At the same time, online projects of the SSPL and PM are advantageously distinguished by a wider thematic range (individual, calendars, thematic), the presence of hashtags in posts and links to electronic copies of the works by the Ukrainian and foreign teachers, stored in the funds of institutions.

Online projects using social networks are an effective means of providing open access to biographical information to various strata of the Ukrainian society. They are popular in Ukraine, in particular among Facebook users, which is confirmed by numerous likes, reposts and comments. This indicates a departure from the boundaries of academic research targeted at a narrow circle of specialists.

4. CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH

In the context of open science, the use of popular social media is one of the effective ways of providing the widest possible audience with the access to research results. Our experience shows that online projects in social networks dedicated to Ukrainian and foreign teachers and educators are an effective form of dissemination of pedagogical biography in the educational and scientific space; they contribute to the restoration and preservation of the national memory and consolidation of the Ukrainian society. In the process of the research, a trend of growth in the number of Ukrainian biographical online projects on the Facebook social network in 2020–2022 has been revealed, which is explained by the decolonization of Ukrainian humanities. Among the developers of online projects (scientific institutions, libraries, museums), the SSEL and PM projects stand out both quantitatively (15) and qualitatively (collective, individual, calendars, thematic). There are no analogues to our domestic resources presented in the article in terms of depth of disclosure and

variability of presentation. Therefore, we believe that the results of our research can be a model to follow, and an impetus for further research in the field of modern biography.

Based on the successful experience of the SSEL and PM activity in social networks, we offer 4 proven models of implementation of biographical online projects for wide use: "Online project on Facebook" (OP:FB), "Online project on Facebook and Instagram" (OP:FB+IG), "Online project on Facebook using a web portal/website" (OP:WWW:FB), and "Online project as a source of virtual exhibition on the website" (OP:FB:WWW). The choice of the online project implementation model is determined by its subject and purpose.

In the course of the study, the authors have come to the conclusion that the online biographical project has the potential of an open science tool, manifested in the following features: *availability of information for users* (the ability to access a large amount of biographical information in various formats; it is easy to find and research information about any individual, regardless of places of stay); *openness for users' cooperation* (the ability to interact with each other, exchange opinions, feedback and questions; supplement information (add your own materials), increase the volume and quality of information about a certain person; share impressions and experiences); *updating of information* (possibility of quick updating of personal information in real time, offering users news, etc.).

The main goal of the online projects is the personalized familiarization of society with the history of Ukrainian and foreign education, through the prism of the humanistic ideas of Ukrainian and foreign teachers of the past. Nowadays, during the war with the russian aggressor, the desire to rethink the knowledge about the life and activity, views and worldview values of the teachers of the past is gaining relevance. The materials of online projects can be widely used in the educational process and research by academics, teachers and students; in the information provision of education – by library workers. Virtual exhibitions and biographical video content play a significant role in the dissemination of pedagogical biographical knowledge, which can become the subject of further research.

REFERENCES (TRANSLATED AND TRANSLITERATED)

[1] UNESCO (2021). UNESCO Recommendation on Open Science. The United Nations Educational, Scientific and Cultural Organization. [Online]. Available: https://unesdoc.unesco.org/ark:/48223/pf0000379949. (in English)

[2] OECD, "Making Open Science a Reality", *OECD Science, Technology and Industry Policy Papers*, 2015, №. 25, OECD Publishing, Paris. doi: http://dx.doi.org/10.1787/5jrs2f963zs1-en. (in English)

[3] Towards Porting Astrophysics Visual Analytics Services in the European Open Science Cloud . Sciacca E. et al. Intelligent Computing. SAI 2020. *Advances in Intelligent Systems and Computing*, eds. K. Arai, S. Kapoor, R. Bhatia, 2020. Vol 1230. P. 598-606, doi: https://doi.org/10.1007/978-3-030-52243-8_43. (in English)

[4] P. Ayris, J-Y. Berthou, R. Bruce, S. Lindstaedt, A. Monreale, B. Mons, Y. Murayama, C. Södergård, K. Tochtermann & R. Wilkinson, (2016). *Realising the European open science cloud*. European Union, doi: https://doi.org/10.2777/940154. (in English)

[5] B. O. Kopanieva, "Scientific communication: from open access to open science', *Bibliotekoznavstvo. Dokumentoznavstvo. Informolohiia*, iss. 2, pp. 35–45, 2017. [Online]. Available: http://nbuv.gov.ua/UJRN/bdi_2017_2_7. (in Ukrainian)

[6] L. D. Berezivska, O. P. Pinchuk, S. M Hopta, Y. F Demyda& K. V. Sereda, "Creation of information and bibliographic resource 'Outstanding educators of Ukraine and the world' and its influence on the development of digital humanities". *ITLT*, no. 87 (1), pp. 1–17, 2022), doi: https://doi.org/10.33407/itlt.v87i1.4825. (in English)

[7] L. D. Berezivska, "Online projects as a form of dissemination of pedagogical biographical knowledge in the educational and scientific space". At: *library. Science. Communication: innovative transformations of resources and services: materials of the intern. scientific conf*. Kyiv, 2022, pp. 424–426. [Online]. Available: https://tinyurl.com/49t5h2jm. (in Ukrainian)

[8] O. P. Mikhno, "Features of the implementation of the strategy of online activities of the Pedagogical Museum of Ukraine", at *Continuing pedagogical education of the 21st century: coll. materials of the 19th International*

pedagogical and artistic readings in memory of prof. O.P. Rudnytska, Kyiv, 2022, pp. 67–70. [Online]. Available: https://lib.iitta.gov.ua/730290/. (in Ukrainian)

[9] I. I. Rozman, *"Ukrainian pedagogical biography (second half of the 20th – beginning of the 21st century)"*. Uzhhorod, Ukraine: RIK-U, 2020. (in Ukrainian)

[10] S. H. Lytvynova, "The current state of use of electronic social networks by teachers of general educational institutions of Ukraine", *ITLT*, iss. 57, iss. 1, pp. 12–24, Feb. 2017, doi: https://doi.org/10.33407/itlt.v57i1.1556 . (in Ukrainian)

[11] O. P. Pinchuk, "Historical and analytical review of the development of social network technologies and prospects for their use in education", *ITLT*, iss. 48, iss. 4, pp. 14–34, Sep. 2015, doi: https://doi.org/10.33407/itlt.v48i4.1267. (in Ukrainian)

[12] R. Hawkins & K. F. Al-Hindi, P. Moss & L. Kern, "Reflections on a collective biography journey", *Emotion, Space and Society*, 2020. doi: https://doi.org/10.1016/j.emospa.2020.100731. (in English)

[13] M. Lozano, M. M. Toraya, D. Montaña, R. P. Sandoval, "Participatory research, biographical narratives and peacebuilding: An experience with teachers in Tolima, Colombia", *Teaching and Teacher Education*, Vol. 125, 2023, doi: https://doi.org/10.1016/j.tate.2023.104054. (in English)

[14] J. Hamann, W. Kaltenbrunner, "Biographical representation, from narrative to list: The evolution of curricula vitae in the humanities, 1950 to 2010", *Research Evaluation*, Vol. 31, Issue 4, October 2022, pp. 438–451, doi: https://doi.org/10.1093/reseval/rvab040. (in English)

[15] R. Breckner & E. Mayer, "Social media as a means of visual biographical performance and biographical work". *Current Sociology*, 0(0). (2022), https://doi.org/10.1177/00113921221132518. (in English)

[16] G. Guazzaroni, Role of Emotions in Interactive Museums: How Art and Virtual Reality Affect Emotions. *Virtual and Augmented Reality in Education, Art, and Museums; Guazzaroni, G., Pillai, A., Eds.* IGI Global. Hershey PA, USA, 2020, pp. 174–193, doi: https://doi.org/10.4018/978-1-7998-1796-3.ch010. (in English)

[17] R. Hassan, "Digitality, virtual reality and the 'empathy machine'", *Digital Journalism,* no. 8 (2), pp. 195-212, 2020, doi: https://doi.org/ 10.1080/21670811.2018.1517604. (in English)

[18] I. Pop and A. Borza, "Technological innovations in museums as a source of competitive advantage", In *Proceedings of the 2nd International Scientific Conf. SAMRO, Sibiu, Romania, 14–16 Oct. 2016*. Volume 1, pp. 398–405. [Online]. Available: https://mpra.ub.uni-muenchen.de/id/eprint/76811. (in English)

[19] M. Shehade and T. Stylianou-Lambert, "Virtual Reality in Museums: Exploring the Experiences of Museum Professionals," *Applied Sciences*, vol. 10, no. 11, p. 4031, Jun. 2020, doi: https://doi.org/10.3390/app10114031. (in English)

[20] D. Agostino, M. Arnaboldi & A. Lampis, "Italian state museums during the COVID-19 crisis: from onsite closure to online openness", *Museum Management and Curatorship*, no. 35 (4), pp. 362–372, 2020, https://doi.org/10.1080/09647775.2020.1790029. (in English)

[21] C. Camarero, M.-J. Garrido& R. San Jose. "What Works in Facebook Content Versus Relational Communication: A Study of their Effectiveness in the Context of Museums", *Int. J. Hum. Comput. Int.*, no. 34 (12), pp. 1119–1134, 2018, doi: https://doi.org/10.1080/10447318.2017.1418475. (in English)

[22] E. T. H. Lam, C. H. Au & D. K Chiu, "Analyzing the use of Facebook among university libraries in Hong Kong", *The journal of academic librarianship*, no. 45(3), pp. 175–183, 2019, doi: https://doi.org/10.1016/j.acalib.2019.02.007 . (in English)

[23] Christian Heise and Joshua M. Pearce, "From Open Access to Open Science: The Path From Scientific Reality to Open Scientific Communication", *SAGE Open*, 2020, v. 10, n. 2, doi: https://doi.org/10.1177/2158244020915900. (in English)

[24] M. Shyshkina, Yu. Nosenko, M. Marienko, "The state of digitization of education in the context of open science", FMO, vol. 37, no. 5, pp. 64–68, Nov. 2022, https://doi.org/10.31110/2413-1571-2022-037-5-009. (in Ukrainian)

[25] T. Yaroshenko, "Open access, open science, open data: how it was and where we are going: (to the 20th anniversary of the Budapest Open Access Initiative", *Ukr. ž. bìbl. ìnf. nauk*, iss. 8, pp. 10–26, Dec. 2021, doi: https://doi.org/10.31866/2616-7654.8.2021.247582 . (in Ukrainian)

[26] V. Bondarenko, "Online project of the Pedagogical Museum of Ukraine "Pedagogical Calendar–2022" during the Russian-Ukrainian war", at: *Museum pedagogy under martial law: a coll. of mater. of the Intern. Round Table*, Kyiv, 2022, pp 271–274, [Online]. Available: https://cutt.ly/83PDXyn. (in Ukrainian)

[27] K. Stepanovych, "Online project "'Sukhomlynsky among the stars': participants, content, web resources", at: *Vasyl Sukhomlynskyi in dialogue with modernity. The way to the heart of a child in traumatic life situations: E-collect. of mater. of the XII Intern. and XXIX All-Ukrain. Pedag. readings*. Chernihiv, 2022, pp. 176–177, [Online]. Available: https://cutt.ly/K3PDNYG. (in Ukrainian)

Text of the article was accepted by Editorial Team 02.04.2023.

ОНЛАЙН-ПРОЄКТИ ЯК ФОРМА ПОШИРЕННЯ ПЕДАГОГІЧНОГО БІОГРАФІЧНОГО ЗНАННЯ В КОНТЕКСТІ ВІДКРИТОЇ НАУКИ

Березівська Лариса Дмитрівна
доктор педагогічних наук, професор, член-кореспондент НАПН України, директорка
Державна науково-педагогічна бібліотека України імені В. О. Сухомлинського, м. Київ, Україна
ORCID ID 0000-0002-5068-5234
lberezivska@ukr.net

Міхно Олександр Петрович
доктор педагогічних наук, старший науковий співробітник, директор
Педагогічний музей України, м. Київ, Україна
провідний науковий співробітник відділу педагогічного джерелознавства та біографістики
Державна науково-педагогічна бібліотека України імені В. О. Сухомлинського, м. Київ, Україна
ORCID ID 0000-0002-5271-9530
amihno@ukr.net

Пінчук Ольга Павлівна
кандидат педагогічних наук, старша наукова співробітниця,
заступник директора з науково-експериментальної роботи
Інститут цифровізації освіти НАПН України, м. Київ, Україна;
провідна наукова співробітниця відділу цифрових технологій та комп'ютерного забезпечення
Державна науково-педагогічна бібліотека України імені В. О. Сухомлинського, м. Київ, Україна
ORCID ID 0000-0002-2770-0838
opinchuk@iitlt.gov.ua

Анотація. У статті досліджено актуальну в контексті відкритої науки проблему використання соціальних медіа для поширення результатів наукових досліджень і реалізації місії інституцій соціальної пам'яті – бібліотек і музеїв – зі збереження, вивчення й популяризації національної педагогічної спадщини. З'ясовано, що в зарубіжній і українській історіографії відсутні спеціальні дослідження про поширення біографічного знання в соціальних мережах. Онлайн-проєкт розглядається і як багатофункціональний інформаційний ресурс, і як цифровий інструмент освітньої діяльності, що за допомогою засобів вебтехнологій демонструє у відкритому доступі широкому колу користувачів спеціально створений контент. Уперше проаналізовано поширення біографічного педагогічного знання шляхом розроблення онлайн-проєктів і реалізації їх засобами соціальних мереж. Біографічні онлайн-проєкти Державної науково-педагогічної бібліотеки імені В. О. Сухомлинського НАПН України та Педагогічного музею України схарактеризовано за такими параметрами: систематизована інформація у формі таблиці (модель реалізації, назва, вебресурс, де реалізовано проєкт, термін реалізації, хештег), групування за типами (колективні, індивідуальні, календарі, тематичні), стислий опис контенту кожного проєкту, графічний макет проєкту. Наведено приклади біографічних онлайн-проєктів. Виявлено тенденцію зростання кількості біографічних онлайн-проєктів в українському сегменті соціальної мережі Фейсбук протягом 2020–2022 рр., спричинену деколонізацією української гуманітаристики. Запропоновано до широкого використання 4 апробовані моделі реалізації біографічних онлайн-проєктів: «Онлайн-проєкт у Фейсбук», «Онлайн-проєкт у Фейсбук та Інстаграм», «Онлайн-проєкт у Фейсбук з використанням вебпорталу/вебсайту», «Онлайн-проєкт у Фейсбук як джерело віртуальної виставки на вебсайті». Аргументовано, що використання соціальних мереж для поширення педагогічної біографіки у формі онлайн-проєктів в освітньо-науковому просторі сприяє не лише ефективному наданню доступу широкій аудиторії до результатів наукових досліджень, а й відновленню і збереженню національної пам'яті.

Ключові слова: відкрита наука; педагогічна біографіка; онлайн-проєкт; соціальні мережі; Державна науково-педагогічна бібліотека України імені В. О. Сухомлинського; Педагогічний музей України.

This work is licensed under Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.