

Ermakova M.V., candidate of pedagogical sciences, deputy director for scientific and methodological work of the Fedoskino institute of lacquer miniature painting – a branch of the Russian university of traditional art crafts, 141052, Fedoskino settlement, Lukutinskaya street, 33, e-mail: ermakova-80@mail.ru

The museum-exhibition space "Lukutin traditions" and the Lukutin educational lecture hall in the system of professional training for artists of traditional art crafts

Abstract: This article analyzes the activities of the museum-exhibition space "Lukutin traditions" and its associated scientific-educational Lukutin lecture hall established within the Fedoskino institute of lacquer miniature painting. The study aims to assess the contribution of this museum-educational space and lecture series to the educational process. Based on an analysis of planned documents and reports from the period 2022–2024, the author views the lectures as a multifunctional phenomenon combining research, educational and popularization roles. Its work is built upon the unique collection of artifacts produced by the Lukutins factory, which serves as a foundation for studying craft traditions. Key results include systematic cataloguing of the museum fund, active involvement of students in research through artifact studies, reproduction of copies and participation in conferences, along with creating a platform for professional dialogue between students, teachers and leading experts in traditional art. The experience gained from the Lukutin lectures can be adapted for use in other educational institutions as an effective tool for enhancing the quality of specialist training in traditional decorative arts.

Keywords: scientifically educational space, Lukutin lectures, traditional art crafts, professional development, miniaturist artist, Fedoskino institute of lacquer miniature painting.

The historical foundation for establishing the scientifically-educational space "Lukutin lecture hall" was provided by many years of activity of the Fedoskino institute of lacquer miniature painting. From its inception in 1931, when the institution was founded (now a branch of the Russian university of traditional art crafts), there began the accumulation of a methodical collection of Fedoskino lacquer miniature painting samples. The pearl of the collection is the set of products made by the Lukutins factory in the 19th century, transferred in 1937 by Moscow collector A.S. Mokrousov to the Fedoskino vocational school for educating future miniature painters (Fig. 1⁶⁸).

Initially serving as templates for copying miniatures from the Lukutin era, over time these exhibits became significant objects for art-historical and cultural

⁶⁸ Figs. 1-11. Photos from the archive of the Fedoskino institute of lacquer miniature painting – branch of the Russian university of traditional art crafts.

heritage research. This led to their public presentation and further investigation into their historical significance.



Fig. 1. Museum-exhibition space "Lukutin's traditions".
Fedoskino institute of lacquer miniature painting

In 2022, under the framework of the grant project “Lukutin traditions”, the institute created a modern exhibition space that not only showcased unique items but also allowed for thorough exploration and systematization of the invaluable legacy of the Lukutins factory.

A logical continuation of the activities of the museum-exhibition space was the opening of the Lukutin lecture hall. The lectures became an integral part of the museum-exhibition space, with their focus being on revealing the historical and cultural significance of the unique collection to a wide audience. Thus, the museum-exhibition space and the lectures form a unified whole.

The activities of the museum-exhibition space "Lukutin traditions" and the Lukutin lectures can be interpreted within the context of contemporary educational practices. Specifically, their goal correlates with the idea of creating a creative educational environment – a fundamental component of professional training that stimulates active cognition and personality development. [3, p. 27]. We perceive such an environment as a space for dialogue, where students actively interact with cultural heritage represented by genuine regional-historical specimens of Fedoskino lacquer miniature painting.

Interaction with students represents an important aspect in the preparation of artists working in traditional applied arts, as it contributes to forming a deep inner motivation grounded in a conscious attitude toward cultural heritage. In this context, engaging students in research activities plays a critical role. According to T.M. Shcheglova, T.M. Nozdrachyova and O.N. Dieva, such endeavors help develop analytical thinking and, most importantly, facilitate the evolution of motivation from external incentives to an inherent desire for knowledge. [12, p. 127]. The researchers emphasize that "students with high levels of intrinsic motivation demonstrate superior professional skills" [12, p. 127].



Fig. 2. Third-year students studying exhibits of the museum-exhibition space "Lukutin Traditions"

Students at the Fedoskino institute engage in studying the exhibits of the museum collection, thereby creating optimal conditions for research work and instilling in them an intrinsic drive to thoroughly explore the regionally historical artistic and technological traditions (Fig. 2).

Other studies, particularly the work of L.N. Mukayeva and T.P. Shastina, specify the function of the lecture hall as a platform for shaping identity based on work with original sources [10]. The authors illustrate how, within the framework of the network project "Our motherland – Altai republic", lecture halls acquainting the audience with archival documents and historical narratives contribute to young people's realization of their regional affiliation.

Reliance on authentic historical and cultural material also underpins the activities of the museum-exhibition space "Lukutin traditions" and the Lukutin lectures. Studying the collection of A.S. Mokrousov and systematically categorizing information about the exhibits form the core content around which educational efforts are structured to shape the cultural identity of future artists engaged in traditional art crafts.

The study by L.M. Vanyushkina and S.A. Tikhomirov [2] develops this idea in relation to the education of future artists in traditional art crafts, highlighting the role of university museum-exhibition spaces as an integrated environment that combines the functions of a "sample room", visual representation of the genesis of crafts, research work and a platform for students' professional success. Drawing on the ideas of N.F. Fyodorov, the authors emphasize that such a space is not merely a repository but rather a "cathedral of faces" – a dynamic institution that ensures the continuity of traditions through hands-on engagement with heritage [2, p. 329].

Thus, the described research, educational and communication dimensions of the lectures' activities are directly linked to the task of training highly qualified artists in traditional applied arts who recognize the profound connection to the traditions of Fedoskino lacquer miniature painting. This task corresponds to the mission of the Russian university of traditional art crafts as a federal innovation platform, one of whose key objectives is the active promotion of traditional art crafts among children, adolescents and young people [4]. The Lukutin lectures, primarily addressing students, act as a practical tool for achieving this strategic goal.

The conducted analysis allows us to conclude that in contemporary scientific literature, the lectures are conceptualized as a complex, multifunctional phenomenon. However, the cited works largely overlook the specificity of the lectures' activities in the context of personnel training for traditional artistic crafts.

The aim of the study is to analyze the results of the Lukutin lectures' work, assess their contribution to the educational process at the Fedoskino institute of lacquer miniature painting and determine strategic directions for their further development.

Methods

For the empirical basis of the study, planned documents and analytical reports on the activities of the Lukutin lectures from 2022 to 2024 were used, containing information on the topics of lectures and the composition of the audience. The analysis was carried out according to the principle of thematic relevance and chronological completeness. The methods of comparative analysis, content analysis and summarization of the obtained data were employed.

The study results confirmed that the significance of the Lukutin lectures lies in their capacity to expand and enrich the educational process. The lectures focus on developing students' cultural horizons and creating conditions for a comprehensive understanding of traditional applied arts.

An analysis of the activities of the Lukutin lectures from 2022 to 2024 revealed the following areas of work:

- presenting research results: carried out by employees of the Fedoskino institute of lacquer miniature painting, directed towards studying the museum collection, understanding the distinctiveness of Fedoskino lacquer miniature painting styles, exploring the creative path and legacy of artists who made significant contributions to the development of Fedoskino lacquer miniature painting, Zhostovo decorative painting and Rostov enamel.

- representing students' research outcomes: oriented towards studying the history of the abovementioned types of traditional applied arts, their regionally historical artistic and technological characteristics, stylistic, compositional, coloristic and aesthetic qualities, as well as studying reference examples for reproducing copies and restoring Lukutin-era items.

- educational outreach activities: aimed at popularizing traditional art crafts among a broad audience, including hosting open lectures, workshops, excursions and exhibitions targeted at different age and social groups (Table 1).

According to the reports, 72% of the lectures were professionally-oriented. The lecturers included specialists in traditional applied arts – art historians, lacquer miniature painters, leading artists in traditional art crafts and representatives of the professional community, such as factory directors and chief artists. The remaining 28% of events were devoted to organizing students' research work (Fig. 3).

The Lukutin lectures serve as an open platform for professional dialogue. It offers a space for publicly presenting scientific and creative accomplishments by students and faculty, as well as sharing unique expertise brought by invited experts, artists and art historians. This facilitates professional reflection, recognition of achievements and exchange of knowledge.

Table 1

Main areas of activity of the Lukutin lectures

Lukutin lectures									
Presentation of research results by faculty members				Presentation of research results by students			Educational and enlightenment activities		
Presentation of the results of studying museum collection exhibits	Publication activity, participation in scientific forums and conferences	Presentation of the results of studying the creative path and legacy of Fedoskino lacquer miniature painters	Presentation of the results of studying the history of artistic crafts and the technological processes of miniature painting	Presentation of the results of studying samples and their reproduction	Presentation of the results of studying the creative paths of notable individuals and the history of traditional art crafts	Preparation of papers and participation in scientific forums and conferences	Workshops	Guided tours	Popular science lectures

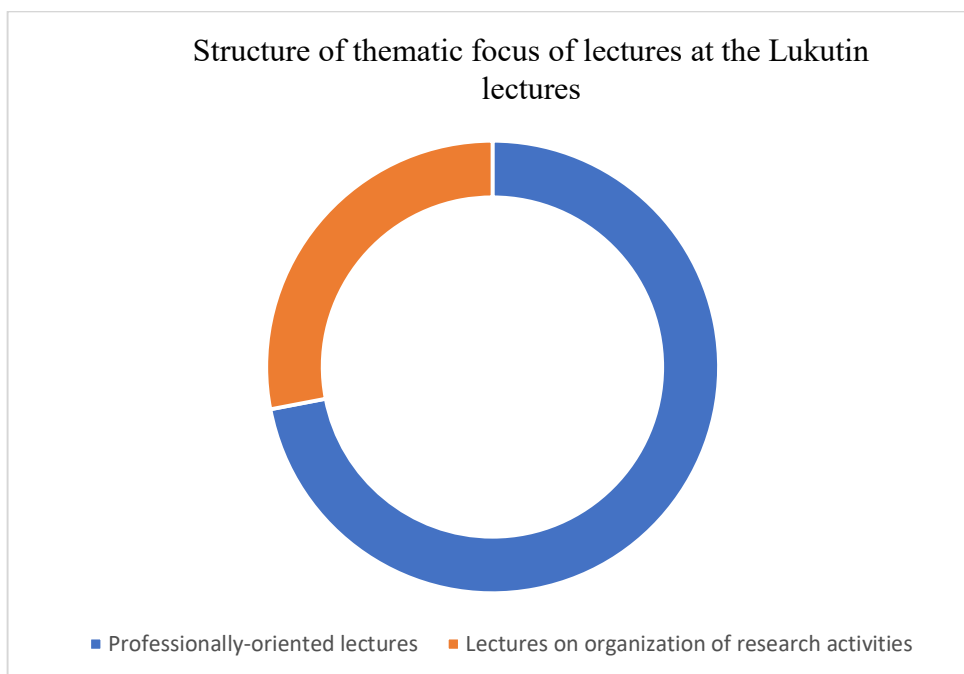


Fig. 3. Structure of thematic orientation of lectures at the Lukutin lectures

Discussion

The Lukutin lectures represent a unique initiative within the scientific-research and museum-educational activities of the Fedoskino institute. It is based on

the traditions of artistic craftsmanship and draws upon the rich collection of the museum-exhibition space "Lukutin traditions", encompassing both Lukutin miniatures and the fruits of over 90 years of students' work in Fedoskino lacquer miniature painting, Zhostovo decorative painting and enamel painting.

One of the most important tasks undertaken by the staff of the Fedoskino institute has been the systematic organization and popularization of the museum collection. Over the course of three years, a comprehensive study of the A.S. Mokrousov collection housed at the Fedoskino institute of lacquer miniature painting was conducted. As a result of this work, a scientific catalog titled "Collection of Lukutin items by A.S. Mokrousov – pearl of the museum fund of the Fedoskino institute of lacquer miniature painting" was prepared and published. (Fig. 4) [7].

Within the framework of the study, 120 exhibits were thoroughly analyzed. Based on the works of art historians (N.O.

Krestovskaya, L.Ya. Suprun, L.K. Przhevalskaya), the authors of the catalog established the main types of seals and peculiarities of applying heraldic double-headed eagles on the products of the Lukutins factory. This enabled accurate attribution of every item, determination of its age and correlation with a particular ownership period of the factory: P.V. Lukutin (1817–1841), A.P. Lukutin (1841–1863, 1863–1888) and N.A. Lukutin (1889–1904). Structured chronologically, the catalog clearly illustrates the evolution of technologies, themes and decorative techniques of the Lukutin masters' lacquer miniature paintings.

The study by I.V. Leitland devoted to the investigation of a collection of easel painting and based on an analysis of archival materials, graduates' memoirs and rare publications from the early 20th century not only introduces new data about the origin of these works into scientific circulation but also reveals the significance of this collection for educational purposes – developing technical skills and artistic taste in future miniaturists. The focus of this research is on paintings from the Aleksandrovskoye estate (former Troitskoe-Sheremetyevo) associated with the names A.V. Vsevolozhsky and P.P. Ryabushinsky.

The author has conducted meticulous work on attribution of artworks, researching the history of the collection and its acquisition by the educational institution in the 1940s. This work, complementing the cataloguing of Lukutin lacquers, demonstrates a multifaceted approach to studying museum heritage and a commitment to preserving historical memory of the cultural environment that shaped the traditions of Fedoskino art. The results are presented in the article "History of origin of paintings in the collection of the Fedoskino institute of lacquer miniature painting" [9] (Figs. 5, 6).

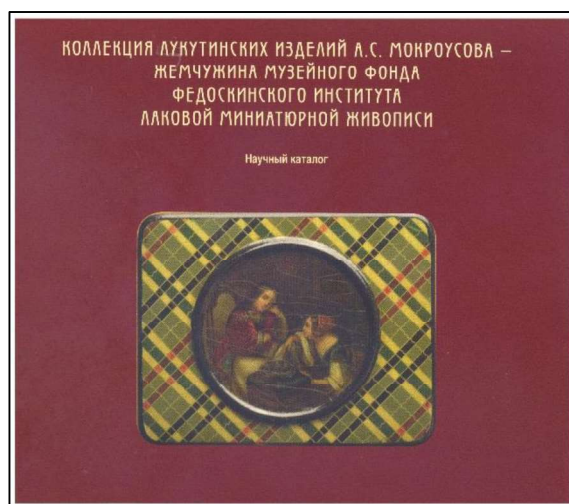


Fig. 4. Cover page of the scientific catalogue "Collection of Lukutin items by A.S. Mokrousov – pearl of the museum fund of the Fedoskino institute of lacquer miniature painting". 2022

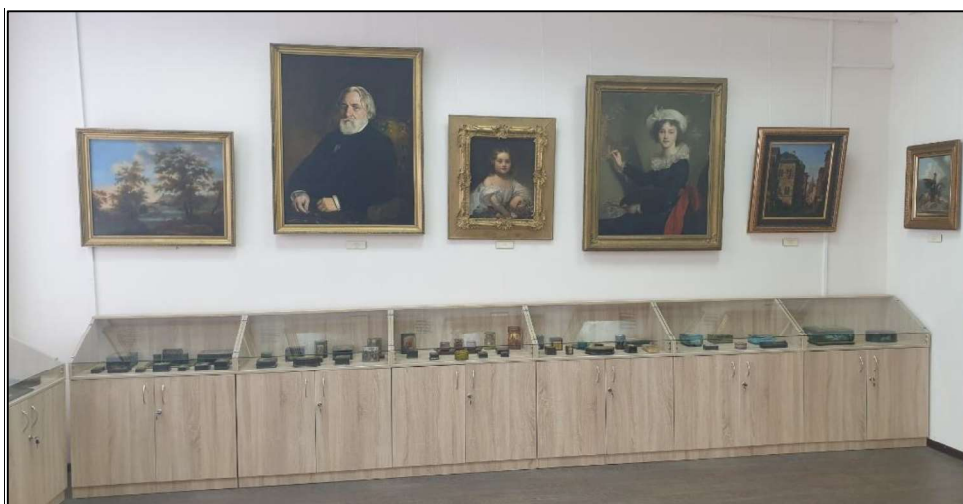


Fig. 5. Collection of painted canvases from the Fedoskino institute of lacquer miniature painting



Fig. 6. Leytland I.V. delivers a lecture titled "History of origin of paintings in the collection of the Fedoskino institute of lacquer miniature painting". 2023

The next important step was the preparation and publication of the inter-university catalogue "Traditional art crafts of Moscow region" [11], implemented jointly by the Fedoskino institute of lacquer miniature painting and the Bogorodskoye institute of wood carving arts.

This project logically develops previous initiatives aimed at systematizing the museum fund, shifting the focus of research from deep analysis of historical artifacts to exploring the outcomes of the educational process. While the A.S. Mokroussov's collection catalogue focused on attributing unique objects from the past, the new work vividly illustrates the continuity of traditions and their embodiment in the works of contemporary students.

The catalogue brings together and provides scholarly descriptions of student coursework and graduation projects related to three key traditional art crafts of the Moscow region: Fedoskino lacquer miniature painting, Zhostovo decorative painting, and Bogorodskoye wood carving arts. The selection of works covers a significant historical period, enabling the authors-compilers to trace the evolution of pedagogical methods, stylistic transformations and artistic-technological techniques used by students of the Fedoskino institute of lacquer miniature painting and the Bogorodskoye institute of wood carving arts (Fig. 7).

A logical continuation of the scientific-research activities of academic staff at the Fedoskino institute involves engaging students in research and design projects. Students present the findings of their studies at national and international platforms such as the international forum for students, postgraduates and young scientists "Culture of Russia in the 21st century: past in present, present in future" and publish

them in scientific journals, including the collection "Solbin readings: traditions and innovation in decorative applied art and folk creativity" [1]. This work allows students not only to gain experience in independent scientific inquiry but also to delve deeper into the historical context and traditions of craftsmanship. By analyzing the work of recognized artists, they acquire rich material for developing their own creative endeavors.

Under the guidance of instructor I.V. Leytland, third-year vocational education students studied the collection of Lukutin's products and created replicas of Lukutin's items (Figs. 8, 9). Such activity requires students to conduct a thorough analysis of the original source, understand the technology of multi-layer writing and master the specific decorative techniques employed by Lukutin's masters, such as scoring, under-shell technique, use of mother-of-pearl and gold leaf.

The results of students' research work are presented within the framework of events organized by the Lukutin lectures series. In the conventional sense, a lectures series serves as a platform for educational talks. The Lukutin lectures preserves this function. The program of the Lukutin lectures includes a cycle of lectures covering a wide range of topics: from the history of particular craft industries and analysis of individual artists' creativity in traditional art crafts to practical seminars on grant application formatting and preparing scientific publications.



Fig. 7. Cover of the catalogue "Traditional art crafts of Moscow region". 2024



Fig. 8. Box "Old Moscow. Red Square". Factory of P. and A. Lukutins. 1841–1863



Fig. 9. Copy of the box "Old Moscow. Red Square" produced by the factory of P. and A. Lukutins, 1841–1863. Artist: E.A. Karpova, third-year student. 2021

Lectures are delivered not only by employees of the Fedoskino institute of lacquer miniature painting but also by invited experts, leading artists from factories (M.V. Lebedev, chief artist of Jostovo factory LLC), art historians (L.S. Rogatova, Museum of folk handicrafts "Usad'ba Lukutinykh"), etc., ensuring continuous professional exchange and high scientific level of events (Figs. 10, 11).



Fig. 10. M.V. Lebedev, honored artist of Russia, chief artist of Zhostovo factory LLC, member of the art expert council of Moscow region, delivering a lecture entitled "200 years of Zhostovo art craft: history, current state and prospects". 2025



Fig. 11. N.M. Przhevalsky, doctor of chemical sciences, professor of chemistry department at Russian state agrarian university – Moscow agricultural academy named after K.A. Timiryazev, delivering a lecture entitled "History of the Lukutins family". 2024

The target audience of the lectures series consists of students enrolled in vocational training programs, bachelor's degree courses and graduate studies at the Fedoskino institute of lacquer miniature painting, the Russian university of traditional art crafts and its branches.

Comparative analysis with similar research conducted at other universities shows that science-oriented formats integrated into the educational environment contribute to shaping students' professional identity, enhancing their research activity and improving the quality of training. Specifically, S.M. Kurbatova and L.Yu. Eisner note that regular participation of students in lecture-based and discussion formats promotes reflection on cultural heritage and professional traditions, which correlates with the findings of the current study [8].

An encouraging direction for further development of the Lukutin lectures and subsequent research could be expanding the scope of the lectures series to reach broader audiences, aiming to popularize traditional applied arts and highlight the value of professional education in this field.

Thus, the scientifically enlightening Lukutin lectures serve as an effective tool integrating scientific knowledge, cultural experience and professional training for future artists specializing in traditional art crafts.

Conclusion

The conducted research leads to the conclusion that the Lukutin lectures represent a crucial component of the exhibition space "Lukutin traditions". Its

activities go beyond traditional lecturing, combining functions of presenting scientific research results, educational outreach and promoting cultural heritage.

The activities of the museum-exhibition space and the lectures series, grounded in the unique museum collection of the Fedoskino institute of lacquer miniature painting and grant-funded projects, make a substantial contribution to the professional development of miniature painters. Evidence supporting this claim includes several qualitative outcomes. Published scientific catalogues (the A.S. Mokrousov collection catalogue and the interuniversity catalogue "Traditional art crafts of Moscow region") introduce valuable materials into scientific discourse and are actively utilized in teaching processes. Regular involvement of prominent craftsmen and art historians in the lectures series fosters conditions for sharing expertise.

The practical significance of the study lies in the fact that the creation and operation model of the museum-exhibition space "Lukutin traditions" and the Lukutin lectures possesses considerable potential for replication in regional-historical centers dedicated to traditional art crafts.

Future research directions include broadening the empirical base through incorporating data on the activities of other museum-exhibition spaces located in branches of the Russian university of traditional art crafts, conducting comparative analyses of different forms of scientific-educational formats and extending the themes and geographical scope of the lectures series to promote traditional applied arts among schoolchildren in neighboring cities.

References

1. II Sol'binskie chteniya : Tradicii i novatorstvo v dekorativno-prikladnom iskusstve i narodnom tvorchestve (v chest' 25-letiya vozrozhdeniya Nikolo-Sol'binskogo zhenskogo monasty'rya) : sbornik materialov Mezhdunarodnoj nauchno-prakticheskoy konferencii, Sol'ba-Moskva, 24–25 noyabrya 2024 goda. – Tekst : e'lektronny'j. – Moskva: Rossijskij gosudarstvenny'j universitet im. A. N. Kosy'gina (Texnologii. Dizajn. Iskusstvo), 2025. – 138 s. – ISBN 978-5-00181-724-6. – EDN: UKLNNWY. – URL: https://www.elibrary.ru/download/elibrary_82285288_95672433.pdf (data obrashheniya: 15.09.2025).
2. Vanyushkina L. M. Muzejno-vy'stavochny'e prostranstva Rossijskogo universiteta tradicionny'x xudozhestvenny'x promy'slov: kul'turny'e realii i obrazovatel'ny'e vozmozhnosti / L. M. Vanyushkina, S. A. Tixomirov. – Tekst : e'lektronny'j // Tradicionnoe prikladnoe iskusstvo i obrazovanie : e'lektronny'j zhurnal. – Sankt-Peterburg, 2025. – № 2 (53). – S. 332-345. – DOI 10.24412/2619-1504-2025-2-327-334. – EDN: ANVVIM. – URL: https://www.dpio.ru/stat/2025_2/2025_02-35.pdf (data obrashheniya: 18.09.2025).
3. Vil'danov I. E'. Kreativnaya sreda nauchno-obrazovatel'ny'x prostranstv: metodologiya, texnologiya professional'no-lichnostnogo razvitiya / I. E'. Vil'danov, R. Z. Bogoudinova, R. S. Safin. – Tekst : e'lektronny'j // Kazanskij pedagogicheskij zhurnal. – Kazan' (Respublika Tatarstan), 2023. – № 3 (158). – S. 23-30. – DOI

10.51379/KPJ.2023.160.3.003. – EDN: TCTLEA. – URL: <https://elibrary.ru/item.asp?id=54129696> (data obrashheniya: 18.09.2025).

4. Vysshaya shkola narodnykh iskusstv (akademiya) – innovatsionnyj centr razvitiya vysshego obrazovaniya v tradicionnykh xudozhestvennykh promyslax, formirovaniya patriotizma i grazhdanskogo samosoznaniya sredstvami tradicionnykh xudozhestvennykh promyslov Rossii / V. F. Maksimovich, L. M. Vanyushkina, S. A. Tixomirov, O. V. Fedotova. – Tekst : elektronnyj // Tradicionnoe prikladnoe iskusstvo i obrazovanie : elektronnyj zhurnal. – Sankt-Peterburg, 2023. – № 1 (44). – S. 26-55. – DOI 10.24412/2619-1504-2023-1-24-52. – EDN: EYQJRX. – URL: https://www.dpio.ru/stat/2023_1/2023-01-06.pdf (data obrashheniya: 18.09.2025).

5. Ermakova M. V. Kolleksiya lukutinskix izdelij: klassifikaciya, periodizaciya, opisanie / M. V. Ermakova. – Tekst : elektronnyj // Tradicionnoe prikladnoe iskusstvo i obrazovanie : elektronnyj zhurnal. – Sankt-Peterburg, 2023. – № 1 (44). – S. 238-248. – DOI 10.24412/2619-1504-2023-1-230-239. – EDN: VZSJHX. – URL: https://www.dpio.ru/stat/2023_1/2023-01-22.pdf (data obrashheniya: 18.09.2025).

6. Zapalaczkaya V. S. Osnovnye podxody i principy formirovaniya modeli pedagogicheskogo kvantoriума (na primere Gosudarstvennogo universiteta prosveshheniya) / V. S. Zapalaczkaya. – Tekst : elektronnyj // Mir nauki, kul'tury, obrazovaniya. – Gorno-Altajsk (Respublika Altaj), 2024. – № 1 (104). – S. 49-53. – DOI 10.24412/1991-5497-2024-1104-49-53. – EDN: OLUAPV. – URL: <https://elibrary.ru/item.asp?id=63020770> (data obrashheniya: 14.09.2025).

7. Kolleksiya lukutinskix izdelij A. S. Mokrousova – zhemchuzhina muzejnogo fonda Fedoskinskogo instituta lakovoj miniatyurnoj zhivopisi : nauchnyj katalog / pod nauchnoj redakciej M. A. Saltanova. – Moskva : Severnyj Palomnik, 2022. – 166 s. – ISBN 978-5-94431-418-5. – Tekst : neposredstvennyj.

8. Kurbatova S. M. Lektorij v vysshej shkole kak simbioz nauchno-metodologicheskix i praktiko-orientirovannyx texnologij razvitiya lichnosti / S. M. Kurbatova, L. Yu. Ajsner. – Tekst : elektronnyj // Vestnik pedagogicheskix nauk. – Belgorod (Belgorodskaya oblast'), 2021. – № 4. – S. 185-189. – EDN: QYZRXL. – URL: <https://elibrary.ru/item.asp?id=46208956> (data obrashheniya: 18.09.2025).

9. Lejtland I. V. Istoriya proisxozhdeniya zhivopisnyx rabot v kollekcii Fedoskinskogo instituta lakovoj miniatyurnoj zhivopisi / I. V. Lejtland. – Tekst : elektronnyj // Tradicionnoe prikladnoe iskusstvo i obrazovanie : elektronnyj zhurnal. – Sankt-Peterburg, 2024. – № 1 (48). – S. 198-207. – DOI 10.24412/2619-1504-2024-1-198-207. – EDN: DRYAJV. – URL: https://www.dpio.ru/stat/2024_1/2024_01-21.pdf (data obrashheniya: 18.09.2025).

10. Mukaeva L. N. Patriotiko-kraevedcheskie molodezhnye lektorii Nacional'noj biblioteki Respubliki Altaj / L. N. Mukaeva, T. P. Shastina // Nauchnye trudy Tuvinskogo gosudarstvennogo universiteta : materialy ezhegodnoj nauchno-prakticheskoj konferencii prepodavatelej, sotrudnikov i aspirantov Tuvinskogo gosudarstvennogo universiteta, posvyashhennoj Godu sem'i v Rossijskoj Federacii, Godu zdorov'ya v Respublike Tyva i 80-letiyu

vxozhdeniya Tuvinskoj Narodnoj Respubliki v sostav SSSR, Ky`zy`l, 26 oktyabrya 2024 goda. – Tekst : e`lektronny`j. – Ky`zy`l : Tuvinskij gosudarstvenny`j universitet, 2024. – S. 364-368. – EDN: SJLRRP. – URL: <https://elibrary.ru/item.asp?id=80393184> (data obrashheniya: 18.09.2025).

11. Tradicionny`e xudozhestvenny`e promy`sly` Moskovskoj oblasti : katalog / pod redakciej M. A. Saltanova, V. M. Naumova. – Moskva : Severny`j Palomnik, 2024. – 160 s. – ISBN 978-5-94431-639-4. – Tekst : neposredstvenny`j.

12. Shheglova T. M. Nauchno-issledovatel`skaya deyatel`nost` kak kriterij professional`nogo stanovleniya obuchayushhixsya srednego professional`nogo obrazovaniya / T. M. Shheglova, T. M. Nozdracheva, O. N. Dieva. – Tekst : e`lektronny`j // Professional`noe obrazovanie v Rossii i za rubezhom. – Kemerovo, 2023. – № 2 (50). – S. 122-129. – DOI 10.54509/22203036_2023_2_122. – EDN: GYFPRJ. – URL: <https://elibrary.ru/item.asp?id=54178123> (data obrashheniya: 18.09.2025).