

Pirogova T.S., lecturer of the department of artistic embroidery at the Russian university of traditional art crafts, 191186, Saint Petersburg, Griboyedov canal embankment, 2, lit. A; e-mail: pirogova.tatayna@yandex.ru

Methods of practical training of students in traditional embroidery drawn-thread techniques

Abstract. The article addresses the current problem of preserving and transmitting traditional cultural heritage within the framework of professional training of students in the field of traditional art crafts.

The purpose of the study is to systematize effective methods of practical training of students in traditional embroidery drawn-thread techniques using the example of one type of artistic craft “Nizhny Novgorod guipure”. The author justifies the importance of applying practical teaching methods in the process of performing exercises aimed at developing stable practical skills and a deep understanding of the technological features of this type of artistic embroidery.

The paper presents a scheme for the step-by-step execution of exercises, built on the principle “from simple to complex”: from practicing basic techniques and motifs to creating independent compositional solutions.

The developed methodological recommendations can be integrated into educational programs of higher and secondary vocational education.

Keywords: traditional art crafts, stitch embroidery, Nizhny Novgorod guipure technique, practical training, method of exercise.

In the contemporary educational paradigm, which is oriented towards the preservation of cultural heritage, the issue of effective transmission of techniques for creating items of traditional applied arts, including embroidery, acquires particular significance.

The training of future artists in traditional applied arts is based on the principles of preserving and developing national artistic traditions. One of the most widespread forms of this art is artistic embroidery, whose foundation lies in its execution technology, closely related to specific regional characteristics. It represents a complex system comprising over eighty types of embroidery techniques, among which those based on the drawn-thread technique hold leading positions [6].

The drawn-thread embroidery technique is a method of pattern creation that involves filling a grid formed by removing threads from a plain-weave fabric. Among the varieties of drawn-thread embroidery is such a type as “Nizhny Novgorod guipure” (“Gorky guipure”), which emerged as a result of the synthesis of traditional drawn-thread technique with other methods of creating openwork patterns, for example, the “pull-out” technique.

This type of embroidery became widespread in the territory of present-day Nizhny Novgorod region at the end of the 19th century, influenced by the fashion

for Western European dresses decorated with white satin stitch, English cutwork and white drawn-thread embroidery. It was precisely the latter “that local craftswomen refined, giving rise to the embroidery technique known as “po vydergu” (“pull-out” technique). The term “guipure” began to be applied to such items by analogy with the French *guipure* – meaning “airy embroidery” [9] (Figs. 1⁴⁴, 2⁴⁵).

Over several generations, craftsmen have carefully preserved and refined the unique technology of Nizhny Novgorod guipure, passing down the valuable secrets of the craft from generation to generation.

In the first quarter of the 20th century, craftswomen mastered the intricacies of Nizhny Novgorod guipure within the framework of artels. One such association was the “Katunki labor artel for sewing and linen embroidery”, founded in 1924 [3].



Fig. 1. Kerchief. Drawn-thread embroidery technique “Nizhny Novgorod guipure”. CJSC “Guipure”. (Nizhny Novgorod city)



Fig. 2. Tablecloth. Drawn-thread embroidery technique “Nizhny Novgorod guipure”. Exhibition hall “Nizhny Novgorod guipure”

The folk embroidery of the Nizhny Novgorod region continues to evolve at drawn-thread embroidery enterprises that are part of the system of artistic crafts of the Russian Federation. These include the Gorodets, Gorky, Lyskovo, Chkalov, Shakhunya factories and the Arzamas drawn-thread embroidery association.

At present, with the aim of preserving and developing the traditional embroidery type known as “Nizhny Novgorod guipure”, the Russian university of traditional art crafts offers a training program for students titled “Modeling with artistic embroidery” within the educational field 54.03.02 Decorative and applied

⁴⁴ Fig. 1. Kerchief (headwear) figure 30/18-21 “Bylina” // CJSC Guipure : website. – URL: <https://gipur-nhp.ru/shop/dress/kosyinka-golovnoy-ubor-risunok-30-18-21-byilina/> (Date of access: 25.10.2025).

⁴⁵ Fig. 2. Exhibition hall “Nizhny Novgorod guipure” / Kanavinsky district centralized library system : website. – URL: <https://book-hall.ru/proekt-goda/nizhegorodskii-khronotop-god-2014/narodnye-promysly/rosa-na-lesnoi-pautinke-nizhegorod-1> (Date of access: 25.10.2025).

arts and folk crafts. The curriculum of this program includes the study of all types of drawn-thread embroidery techniques, including “Nizhny Novgorod guipure”.

Within the framework of the course “Mastery in artistic embroidery”, the study of drawn-thread embroidery techniques is aimed at the purposeful development of the following professional qualities in students:

- attention to detail: assessment of thread quality and fabric tension, adherence to stitch execution technology;
- analytical thinking: creation of three-dimensional elements and complex compositional solutions;
- color sense: selection of harmonious color combinations;
- construction of balanced compositions;
- patience and perseverance: concentration during the performance of repetitive actions over an extended period.

Upon completion of the study material on the topic “Production of an item using the drawn-thread embroidery technique ‘Nizhny Novgorod guipure’”, students:

- acquire theoretical knowledge in the field of the history of development of drawn-thread embroidery techniques and the specifics of their execution;
- develop skills in filling the net in white drawn-thread work with such “razdelki” (decorative fillings) as dense “nastil”, single and double darning, chain stitch and others;
- master the skills of selecting and applying traditional and innovative materials, taking into account their form-building and functional properties, for the creation of embroidered products using the drawn-thread technique of “Nizhny Novgorod guipure”;
- enhance their skills in: developing design concepts based on a creative approach to problem-solving; creating comprehensive functional and compositional solutions; producing items with artistic embroidery according to traditional technologies and using traditional materials⁴⁶.

The creation of products within the framework of the discipline “Mastery in artistic embroidery” requires not only a creative approach from students to their design and manufacture, but also a well-founded selection by the teacher of effective methods for structuring the educational process with the aim of developing students' independence and artistic-creative thinking.

For the successful implementation of the educational process, the teacher should select methods and techniques that ensure effective assimilation of educational material, development of cognitive abilities, activity and independence of students [5, p. 387].

In the history of pedagogy, practical teaching methods applied in traditional art crafts, including embroidery, have consistently emphasized the importance of learners' creative abilities. The integration of project-based and independent work is

⁴⁶ Working program of the academic discipline (module) “Modelling with artistic embroidery”. – URL:<https://www.vshni.ru/doc/uchprogr/bak/5.pdf>
Б1.В.05.Мастерствопохудожественнойвышивке.pdf (date of access: 03.12.2025).

a defining factor that ensures the high quality of the didactic process and the effectiveness of mastering subject-specific knowledge.

According to the analysis of the curriculum of the educational program “Modelling with artistic embroidery”, the working program of the discipline “Mastery in artistic embroidery”, as well as considering the specifics of the educational process organization, it has been established that the key form of instruction is practical classes based on the application of practical methods. These methods aim to deepen theoretical knowledge and develop the skills necessary for solving professional and creative tasks.

According to P.I. Pidkasisty, practical teaching methods are approaches oriented towards the active engagement of learners and the application of theoretical knowledge in practice. These include exercises, creative, practical and laboratory work, as well as business games, which ensure the interconnection between acquired theoretical knowledge and practical application [7, p. 161].

According to the definition by N.M. Aleksandrova, practical teaching methods in the field of traditional applied arts constitute a system of sequential and interrelated actions of the participants in the educational process, which ensures the acquisition of professional abilities and skills, as well as the qualities and norms of practical training [1, p. 11]. The effectiveness of applying practical teaching methods depends on the concretization of educational objectives, individual characteristics of students, the degree of methodological organization of educational material and the level of professional training of the instructor [8, p. 95].

The study of traditional drawn-thread embroidery techniques presupposes a systematic approach with an emphasis on the performance of practical exercises. Within the framework of practical classes, students master the specifics of each drawn-thread embroidery technique, refine their skills in the accurate reproduction of ornamental patterns and elements.

According to Yu.K. Babansky, “exercise is one of the most effective practical teaching methods. The development of a set of tasks, their content, the selection of tools and methods of implementation depend on the discipline being studied, the nature and scope of the educational material, as well as the level of preparation and age characteristics of the learners. The effectiveness of exercises is directly dependent on the ability to rely on established requirements, rules for their execution, and the technology of artistic embroidery” [2, p. 129].

As an example, an assignment on the topic “Production of an item using the drawn-thread embroidery technique ‘Nizhny Novgorod guipure’” has been analyzed. The study of this topic within the curriculum is allocated 288 academic hours of classroom work. The implementation of the content is structured in accordance with the main didactic principles: “from simple to complex”, systematicity and consistency, scientific rigor, accessibility, the connection between theory and practice, visualization and durability in mastering knowledge.

The thematic focus of the assignments determines the stages of work execution.

The first stage is the preparatory phase (cutting and attaching fabric pouches⁴⁷, hooping the fabric, marking) (4 hours), aimed at reinforcing knowledge, skills and developing abilities in working with fabric. Special attention is given to the even tensioning of the fabric in the hoop, which prevents distortion of the grid during the embroidery process.

The simplest fabrics for embroidery are linen and blended (linen/polyester) fabrics, as well as raw canvas, since they have a clearly visible plain weave structure, which facilitates the embroidery process. More challenging to work with are silk and fine cotton fabrics (batiste, marquisette) [4]. The development of precision and neatness in laying out elements is practiced through embroidery on thin, translucent fabrics, such as chiffon.

At this stage, exercises such as “Fabric cutting”, “Securing fabric in the hoop (hooping)” and “Fabric marking” are applied. Their purpose is to reinforce previously acquired skills and develop the speed of performing operations. Since similar exercises were used in the study of other types of embroidery, they do not cause difficulties for the learners.

The second stage – the performing stage (284 hours) – is comprehensive and consists of sub-stages, each represented by a system of exercises. For instance, the sub-stage of fabric preparation for embroidery includes the following exercises: “Marking”, “Thread pulling” (or “Drawing out threads”) and “Executing a preliminary edge with satin stitch”.

The practical mastery of basic techniques begins with special exercises aimed at developing skills in “drawing out” threads, creating a net and accurately reproducing line stitches. The openwork structural grid is formed by carefully removing certain threads of the fabric and subsequently gathering the remaining threads into columns, which create a rhythmic and airy background for the further placement of embroidery elements.

The first exercise involves creating a uniform and neat grid with a cell size of 0.8-1.0 cm. During the process, students execute an edge finishing to prevent fabric fraying and perform grid trimming using the following exercises: “Executing a preliminary edge with satin stitch” and “Trimming grid threads” (Fig. 3)⁴⁸.

The next exercise, “Thread pulling”, is aimed at mastering the “drawing out” technique. To consolidate the skill of grid formation, it is necessary to work on rectangular hoops or frames to prevent fabric deformation (Fig. 4).

The sub-stage “Wrapping the grid columns” is associated with preparing the grid for the execution of embroidery elements. At this stage, students must learn to form a grid with square cells (Fig. 5). When performing this exercise, special attention is given to precise needlework, which prevents the threads from unraveling and ensures the integrity of the pattern structure.

⁴⁷ Pouches (pockets) – a rectangular piece of fabric, folded lengthwise along the warp thread, with a width not exceeding 7–9 cm, featuring evenly spaced slits for threading a cord, which are necessary for securing the fabric in a hoop. Round or square thin but sturdy sticks or metal rods are inserted into these slits to help stretch the fabric.

⁴⁸ Figs. 3-5, 8-10. Photo by the author of the article.

Such exercises contribute to the development of hand movement coordination and attention to detail, fostering in students the skills of neat execution and thread tension control. These skills form the basis for embroidering large-scale items and promote stable control over the work process in accordance with the established technology.



Fig. 3. Performing an exercise “Executing a preliminary edge with satin stitch”

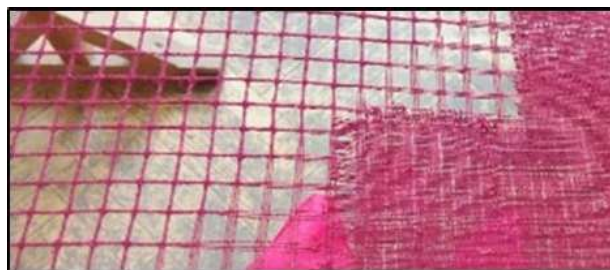


Fig. 4. Performing an exercise “Thread pulling”

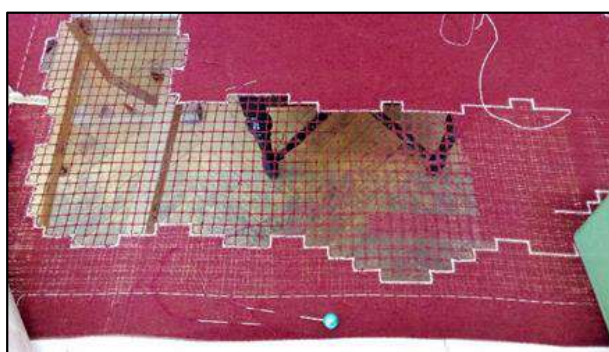


Fig. 5. Performing an exercise “Wrapping the grid columns”

When using the proposed set of exercises, thorough supervision by the teacher is required to ensure compliance with the technological sequence of embroidery execution and occupational safety regulations. The presented system of exercises enables the development of skills in performing technological operations and facilitates the transition to working on more complex elements of the item.

The main and most time-consuming sub-stage involves the execution of collar elements of varying complexity. The simple elements of the Nizhny Novgorod guipure drawn-thread embroidery technique include “leaf”, “kopeechka” (small round element) and “twig with triple leaves”. More complex elements are as follows:

- large “spider” (“pauchok”), executed by laying threads over four grid columns and using cotton floss thread in a single strand for the foundation threads;
- small elements – “spider”, “kopeechka” and “fly” (“mushka”) – worked in the center of a single cell on four or eight intersecting foundation threads, making three to four turns with a single strand of cotton floss, depending on the cell size;
- horseshoe (“podkovka”), executed with a “darning” stitch, filled with three to four circular rows (Figs. 6, 7⁴⁹).

⁴⁹ Figs. 6, 7. Exhibition hall of CJSC “Nizhny Novgorod guipure” / Kanavinsky district centralized library system : website. – URL: <https://book-hall.ru/proekt-goda/nizhegorodskii-khronotop-god-2014/narodnye-promysly/rosa-na-lesnoi-pautinke-nizhegorod-1> (date of access: 15.02.2026).



Fig. 6. Simple embroidery elements
“Nizhny Novgorod guipure”

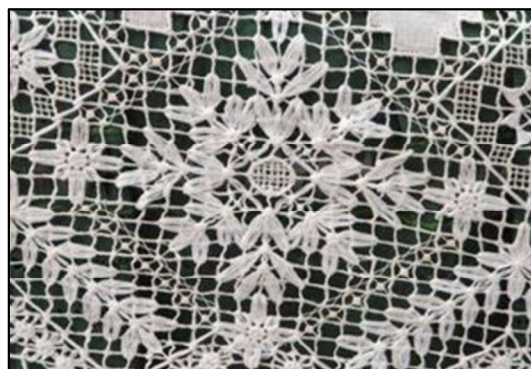


Fig. 7. Complex embroidery elements
“Nizhny Novgorod guipure”

In pedagogical practice, when performing elements within the grid, students often make the following mistakes, which lead to a decrease in the quality of the finished product:

- excessive tension of the working thread, which results in deformation and the formation of folds;
- execution of elements with a loosely tensioned thread, leading to sagging or tightening of the element;
- improper securing of the working thread at the beginning and end of the work, as a result of which the thread tip may come loose from the fabric, causing the element to unravel.

As students complete individual embroidery elements, they learn to combine them correctly, creating complex ornamental compositions. This fosters the development of a sense of rhythm and an understanding of pattern structure – skills essential for the accurate reproduction of traditional techniques.

Mastering the basic embroidery elements serves as the foundation for completing complex practical assignments, during which students develop skills in the precise reproduction of patterns and the competent use of each element within a unified composition. This process enhances the level of professional training in the field of traditional embroidery.

The practice of filling grid cells with simple drawn-thread elements includes exercises such as “Filling a single grid cell with the simplest elements (“Bug”, “Loop”)”; “Executing the element ‘Spider with outline’”; “Combining several elements into a simple composition (e.g., rosette)”.

While performing the proposed exercises on sequentially filling individual square sections of the grid with darning stitch using a single thread from a strand of cotton floss, students regulate the uniformity of thread tension and the accuracy of needle insertion into the fabric. This ensures that the executed elements do not crease the fabric and create an even pattern.

At this stage, it is recommended to use basic motifs – such as daisies or twigs – within a conventional grid, in order to become accustomed to the rhythm of the stitches and their distribution. Subsequently, exercises are introduced that focus on combining elements within one and several adjacent cells. Students refine their skill

in creating transitions from densely packed elements to openwork ones, taking into account the smoothness of lines and the balance of pattern density.

One of the exercises aimed at pattern formation is the creation of small motifs using several elements characteristic of Nizhny Novgorod guipure embroidery. Students are tasked with embroidering a fragment of an ornament that includes “kukolka”, “podkovka” and “moshka” within a limited area. Performing such exercises enables learners to comprehend the harmonious combination of elements and develops their aesthetic perception of composition, which is subsequently important for the independent creation of original patterns.

After mastering the basic embroidery techniques, students proceed to create the openwork background, which forms the basis for constructing complex relief patterns of Nizhny Novgorod guipure (Figs. 8–10). It is important to note that a mismatch between the needle thickness, the density of the fabric chosen for embroidery or the thread thickness can lead to damage to the pattern and the wrapped grid. Such technological violations are observed in students who lack sufficient knowledge in the field of materials science.



Figs. 8-10. Stages of embroidery element execution

Another common mistake and violation of the Nizhny Novgorod guipure embroidery technique is the failure to execute elements according to the proposed patterns, since any deviation leads to pattern displacement and asymmetry of the design. In this case, a set of exercises is applied for forming the openwork background while studying the basic embroidery techniques, with the help of which patterns are created. Their application allows for controlling thread tension and ensuring the uniform placement of embroidery elements.

The step-by-step execution of exercises ensures the effective mastery of complex technological techniques in artistic embroidery. Assignments are carried out in accordance with didactic principles:

- mastering simple stitches: satin stitch, chain stitch;
- performing compositions with ornamental elements and forming an openwork background.

Special attention is given to the combination of openwork and relief elements. Students master techniques for a smooth transition from a transparent background

to dense patterns, refining their skills in thread tension control and the precision of embroidery element execution. The exercises include performing motifs that combine the lightness of an openwork structure with the expressiveness of relief details – a technique characteristic of Nizhny Novgorod guipure and related traditions.

An effective means of developing embroidery skills is the use of elements from modern techniques similar to Richelieu. These techniques involve the use of cutwork with a buttonhole stitch, allowing for a particularly light and refined effect.



Fig. 10. A. Ustimenko, Fourth-year bachelor's degree student. Collar. 2024.
Nizhny Novgorod guipure drawn-thread embroidery technique.
Supervisor: T.S. Pirogova

The completion of these assignments contributes to the development of skills in creating complex compositions, fosters the ability to integrate traditional stitches and elements into a unified artistic image and also cultivates aesthetic taste. Mastering the techniques for creating an openwork background and relief patterns becomes a necessary stage before transitioning to the comprehensive application of the Nizhny Novgorod guipure drawn-thread embroidery technique in independent practical works (Fig. 10).

The exercises “Repetitive actions” and “Practicing basic stitches on lines, circles, squares” primarily focus on mastering technical skills, precision in following the samples that students replicate, as well as neatness and thoroughness in execution. “This process is quite complex, labor-intensive and, at first glance, may seem somewhat monotonous. However, the strict regimen for mastering techniques and various embroidery methods, along with adherence to the criterion of precise replication of the sample, ultimately proves to be justified” [8, p. 10].

Performing the proposed exercises enables students to develop the ability to notice the finest details: nuances of the pattern, quality of the thread and degree of fabric tension. Exercises aimed at concentration – such as analyzing complex patterns, studying the fabric structure and examining stitch characteristics – contribute to the development of attention to detail. The combination of reproductive and creative assignments within the section “Execution of items in complex embroidery techniques” stimulates both the educational and artistic-creative activities of the learners.

The knowledge acquired by students in the course “Technology and materials science” has a direct impact on the level of performance skills, as well as the speed and quality of embroidery execution. Mastering the basic skills of executing

elements characteristic of the Nizhny Novgorod guipure drawn-thread embroidery technique is significant when creating finished items.

The process of studying the Nizhny Novgorod guipure embroidery technique and the execution of the product is carried out under the supervision of an educator. The goal of pedagogical support is to identify and eliminate typical errors at the early stages of training. Such errors include: incorrect placement of embroidery elements; mismatch between thread thickness and fabric density, which causes deformation of the embroidery in the finished product and shifts embroidery fragments from their intended positions; gaps appearing in the fillings; excessively high stitch density, which creates excessive “load” on the thread. The educator, in turn, demonstrates to the students methods for correcting errors when executing the most complex elements.

In the process of mastering artistic embroidery, all exercises of the performing stage are classified as complex, since they are aimed at integrating acquired skills into the process of completing a finished product and applying knowledge in a new situation (independent work of students, execution of a product using the selected embroidery technique).

Overall, the inclusion of practical teaching methods in the content of the discipline “Mastery in artistic embroidery”, exemplified by the section “Execution of items in complex embroidery techniques”, contributes to the development of professional interest in artistic embroidery and the formation of practical skills, including:

- strict adherence to quality standards when completing academic works;
- the ability to perform calculations of embroidery elements;
- confident mastery of various embroidery techniques;
- a creative approach to solving practical tasks, based on a deep understanding of the historical and regional artistic and technological traditions of artistic embroidery.

The analysis of completed works, produced within the framework of the exercise complex, demonstrates a positive dynamic in mastering the educational material, as well as students’ confidence and automatism of actions and their understanding and application of embroidery technology when completing academic assignments.

The systematic use of exercises is an effective method for mastering the traditional drawn-thread embroidery technique of “Nizhny Novgorod guipure”, which is confirmed by the positive results of students’ interim assessments.

An exercise, as a type of practical teaching method, ensures the formation of students’ ability to apply acquired knowledge in practical activities, develops logical thinking, self-control and the ability to identify and correct their own mistakes. The considered complex of exercises can be successfully adapted for teaching other artistic embroidery techniques, which confirms the universality of this methodological approach.

References

1. Aleksandrova N. M. Professional'naya pedagogika : metodologiya i teoriya obucheniya : uchebnoe posobie dlya studentov pedagogicheskix uchebny'x zavedenij i nauchno-pedagogicheskix rabotnikov professional'nogo obrazovaniya / N. M. Aleksandrova. – Nizhnij Novgorod, Sankt-Peterburg : Volzhskij gosudarstvenny'j inzhenerno-pedagogicheskij universitet : Lyubavich, 2010. – 188 s. – Tekst : neposredstvenny'j.
2. Babanskij Yu. K. Pedagogika : uchebnoe posobie dlya studentov pedagogicheskix institutov / [Yu. K. Babanskij i dr.] ; pod redakciej [i s predislaviem] Yu. K. Babanskogo ; [posleslovie V. A. Slavenina]. – 2-e izdanie, dopolnennoe i pererabotannoe. – Moskva : Prosveshhenie, 1988. – 608 s. – Tekst : neposredstvenny'j.
3. Gonchar E. V. Turisticheskij marshrut «Katunskaya vy'shivka» v Nizhegorodskoj oblasti / E. V. Gonchar. – Tekst : e'lektronny'j // Sovremennyy'e problemy servisa i turizma. – Moskva, 2015. – T. 9, №. 4. – S. 138-140. – EDN: UYNAOD. – URL: <https://cyberleninka.ru/article/n/turisticheskij-marshrut-katunskaya-vyshivka-v-nizhegorodskoy-oblasti/viewer> (data obrashheniya: 09.09.2025).
4. Kamneva S. Yu. Izuchenie problem teorii i praktiki professional'nogo obrazovaniya v oblasti xudozhestvennoj vy'shivki / S. Yu. Kamneva. – Tekst : e'lektronny'j // Tradicionnoe prikladnoe iskusstvo i obrazovanie : e'lektronny'j zhurnal. – Sankt-Peterburg, 2019. – № 4 (31). – S. 30-37. – DOI 10.24411/2619-1504-2019-00064. – EDN: SZHOPF URL: http://dpio.ru/stat/2019_4/2019-04-05.pdf (data obrashheniya: 07.09.2025).
5. Maksimovich V. F. Teoretiko-metodologicheskie osnovy' podgotovki specialistov v oblasti tradicionnogo prikladnogo iskusstva / V. F. Maksimovich. – Tekst : e'lektronny'j // Nauchny'j dialog. – Ekaterinburg, 2016. – № 12 (60). – S. 387-397. – URL: <https://cyberleninka.ru/article/n/teoretiko-metodologicheskie-osnovy-podgotovki-spetsialistov-v-oblasti-traditsionnogo-prikladnogo-iskusstva> (data obrashheniya: 16.09.2025).
6. Nosan' T.M. Soderzhanie i metody' professional'nogo obucheniya texnologii xudozhestvennoj vy'shivki budushhix xudozhnikov – masterov : special'nost' 13.00.08 ; dissertaciya na soiskanie uchenoj stepeni kandidata pedagogicheskix nauk / Nosan' Tat'yana Mixajlovna ; [Mesto zashhity': Vy'sshaya shkola narodny'x iskusstv]. – Sankt-Peterburg, 2012. – 204 s. : il. – Tekst : neposredstvenny'j.
7. Pidkasisty'j P. I. Pedagogika : uchebnik dlya studentov vy'sshix uchebny'x zavedenij, obuchayushhixsya po napravleniyu 050100 «Pedagogicheskoe obrazovanie» / P. I. Pidkasisty'j, V. A. Mizherikov, T. A. Yuzefavichus ; pod redakciej P. I. Pidkasistogo. – 2-e izdanie, pererabotannoe i dopolnennoe. – Moskva : Akademiya, 2014. – 620 s. – ISBN 978-5-4468-0229-6. – Tekst : neposredstvenny'j.
8. Shveczova O. V. Innovacionny'e texnologii xudozhestvennoj vy'shivki v ispolnitel'skom masterstve pri podgotovke specialistov v oblasti tradicionnogo prikladnogo iskusstva («glad' v soedinenii tkani») / O. V. Shveczova. – Tekst :

e`lektronny`j // Tradicionnoe prikladnoe iskusstvo i obrazovanie : e`lektronny`j zhurnal. – Sankt-Peterburg, 2017. – № 4 (22). – S. 9-16. – URL: https://www.dpio.ru/stat/2017_4/3.Shvetsova.pdf (data obrashheniya: 10.10.2025).

9. Sapry`gina Yu. Russkij gipyur – strochevaya vy`shivka «po vy`dergu» / Yu. Sapry`gina // Parlamentskaya gazeta : sajt. – URL: <https://www.pnp.ru/social/russkiy-gipyur-strochevaya-vyshivka-po-vydergu.html> (data obrashheniya: 15.12.2025).