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STUDENT EMBROIDERY OPERATION PEDAGOGICAL WAY OF IMPROVING COMPETENCES MODEL

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Abstract : The article develops a pedagogical model for improving students' operational competencies in the art of embroidery, which substantiates the specific features of embroidery activity and the methodology for developing operational (i.e., execution, application) skills through practical exercises.

Keywords and phrases : Embroidery, Operational competence, Pedagogical model, Practical training, Vocational education, Handicraft, Innovative approach, Vocational skills, Skill classes, Traditional art

Introduction: In today's globalization environment, preserving national crafts, teaching them to the younger generation, and developing practical skills are becoming one of the most pressing issues. Folk art, in particular embroidery, is one of the types of crafts that have not only aesthetic value, but also economic and cultural significance. By teaching it, students can develop creativity, patience, respect for nationality, and interest in practical work. The Uzbek-Soviet encyclopedia explains the word embroidery as follows.

Embroidery (Persian-Taj. окшид - drawn, drawn) is the most ancient and widespread type of applied decorative art. Embroidery flowers (patterns) are sewn by hand (needle, looped needle, looped bigiz bn) or on a pop-up machine, mainly on fabric (buz, chit, satin, silk, velvet, movut, etc.) and leather (boots, mahsi, knife sheaths, belts, horse harness, etc.). Types of embroidery sewn on fabric: palak, so'zana, kirpech, zardevor, gul-kurpa, cheyza, dorpech, bugjoma, curtain, belt, pillowcase and other artistic items; embroidery is also sewn on hats and shirts [1..,406 b].

In the centuries-old history of the Uzbek people, folk decorative arts have been rich and diverse, constituting the most wonderful and popular part of our cultural heritage. The types of art that have arisen and flourished in the Uzbek land are famous throughout the world for their uniqueness and uniqueness. If we reflect on such stages of development and progress, we will witness that the roots of Uzbek decorative arts go back to the distant past, to the primitive society of mankind [2; p. 10].

The Uzbek people have been known to the world for their profession, labor, honesty and purity since time immemorial . Alisher Navoiy said: "The one who preserves a craft is not a net, the end is the end, The one who takes it to the ground is the end." Great scholars have specifically described the importance of craft in human life. When our people say "Craftsmanship is the source of life", they mean that a person's livelihood comes from craft and labor. Our ancestors have been craftsmen, creators and innovators since time immemorial . Even after hundreds of years, their crafts have not lost their value and still demonstrate their beauty and freshness [3..,21b].

The pedagogical model allows for a gradual, planned, and results-oriented learning process. It provides a basis for students to define their goals, select learning content, define methods, and create assessment criteria.

This is very important in embroidery, as it requires technical skills, aesthetic thinking and patience. In order to ensure the compatibility of approaches and methods, each student's learning style, abilities and level of experience are different. Through the pedagogical model, the teacher can apply individual approaches to his students, choose interactive methods, and combine theory and practice.

Formation of creative thinking and aesthetic taste. One of the important aspects of the art of embroidery is creativity. With the help of the pedagogical model, students develop thinking in choosing colors, the harmony of national and modernity in ornaments, and the skills of creating their own style.

Ability to evaluate effectiveness. Based on the model, it allows the teacher to monitor the teaching process, assess knowledge and skills, and make changes if necessary. Increase interest in the profession and stimulate motivation

The pedagogical model increases student interest through interactive lessons, visual materials, and project-based learning (e.g., creating your own design).

The pedagogical model of teaching embroidery serves to form not only technical skills, but also educational, creative, and aesthetic aspects. This, in turn, serves to deeply and consciously master the craft and preserve the national heritage.

A pedagogical model is a set of theoretical and practical foundations for organizing the teaching and learning process, which determines the methods for effectively teaching students knowledge, skills, and competencies. A pedagogical model shows the teacher what methods, tools, technologies, and approaches to use.

The main components of the pedagogical model are:

1. Goal – The intended outcome of teaching (for example, the formation of student competence).

2. Content – The knowledge, skills, and competencies to be learned.

3. Methods – Methods of imparting knowledge and teaching (e.g., problem-based learning, interactive methods).

4. Tools – Technical or visual aids used in the lesson (e.g., presentations, videos, teaching aids).

5. Monitoring and Evaluation – Methods of monitoring and evaluating student achievement.

6. Teacher-student relationship – Level of communication and collaboration.

The pedagogical model is of great importance in teaching embroidery, as this art form develops not only practical skills, but also qualities such as aesthetic taste, respect for cultural heritage, creativity, and patience.

The pedagogical model teaches embroidery in a systematic and step-by-step manner, creating a clear methodology that is easy for students to understand:

Step-by-step approach (from simple patterns to complex techniques)

Proper use of didactic materials

Schedule of training sessions

The pedagogical model ensures that embroidery is taught not only as a practical activity, but also in harmony with theoretical foundations:

Color harmony, the meaning of folk patterns

Historical and cultural context

Knowledge of fabrics, yarns, and equipment

The model develops a creative approach and originality in students:

Creating a pattern, innovating

Formation of aesthetic taste

Increasing interest in local art

Each student's ability and learning speed are different. The pedagogical model provides a tailored approach:

Differential education (working with strong and weak students)

Auxiliary tools and additional exercises

Creating opportunities for independent and group work

Based on the pedagogical model, the criteria for monitoring and evaluating results in embroidery lessons are clearly defined:

Technical precision, clean workmanship

Pattern harmony and compliance with aesthetic requirements

Level of readiness for independent work

The pedagogical model of teaching embroidery increases the effectiveness of the learning process, develops the creative potential of the student, and serves to preserve cultural heritage. Through this model, the student not only learns a profession, but is also brought up in the spirit of respect for the art of his people.

We can see examples of widely used pedagogical models below:

Model name	Definition
Traditional model	A teacher-centered, information-based model.
Constructivist model	Knowledge is formed based on the student's experience. The student is an active participant.
Cooperative learning model	Building knowledge and skills through working in groups.
Problem-based learning	Students are given problems and learn by solving them

model	independently.
STEAM model	A model that integrates science, technology, engineering, art, and mathematics.

To achieve success in the field of embroidery, not only theoretical knowledge, but also operational competencies are important - that is, the ability to perform correctly, apply technical methods, and work with materials. Therefore, this article develops a pedagogical model aimed at developing students' operational competencies in embroidery, and analyzes its main components, content, and effectiveness of application.

This research serves to strengthen the practical orientation of vocational education, integrate folk craft traditions into the modern education system, and develop professional skills necessary for independent work in students.

Methods: In this study, the following scientific and methodological methods were used to develop and test a pedagogical model aimed at developing students' operational competencies in embroidery:

1. Analysis and synthesis - scientific literature, curricula, and practical experiences on folk crafts, embroidery, operational competencies, and their formation were studied and systematically analyzed.

2. Pedagogical observation - during practical classes on embroidery, students' activities were observed, their movements and level of mastery of technical techniques were assessed.

3. Experimental work - experimental work was conducted based on the pedagogical model, and the differences between the control and experimental groups were identified.

4. Surveys and interviews — opinions and feedback on vocational training in embroidery were collected with the participation of students, teachers, and artisans.

5. Modeling - a pedagogical model designed for the gradual formation of operational competencies was developed, and its components (targeted, substantive, activity, and outcome) were substantiated.

6. Mathematical-statistical analysis - the results of experimental work were statistically analyzed and the effectiveness of the pedagogical model was assessed.

As a result of introducing folk crafts into the educational process:

Students' interest in national values increases;

The career guidance process is more efficient;

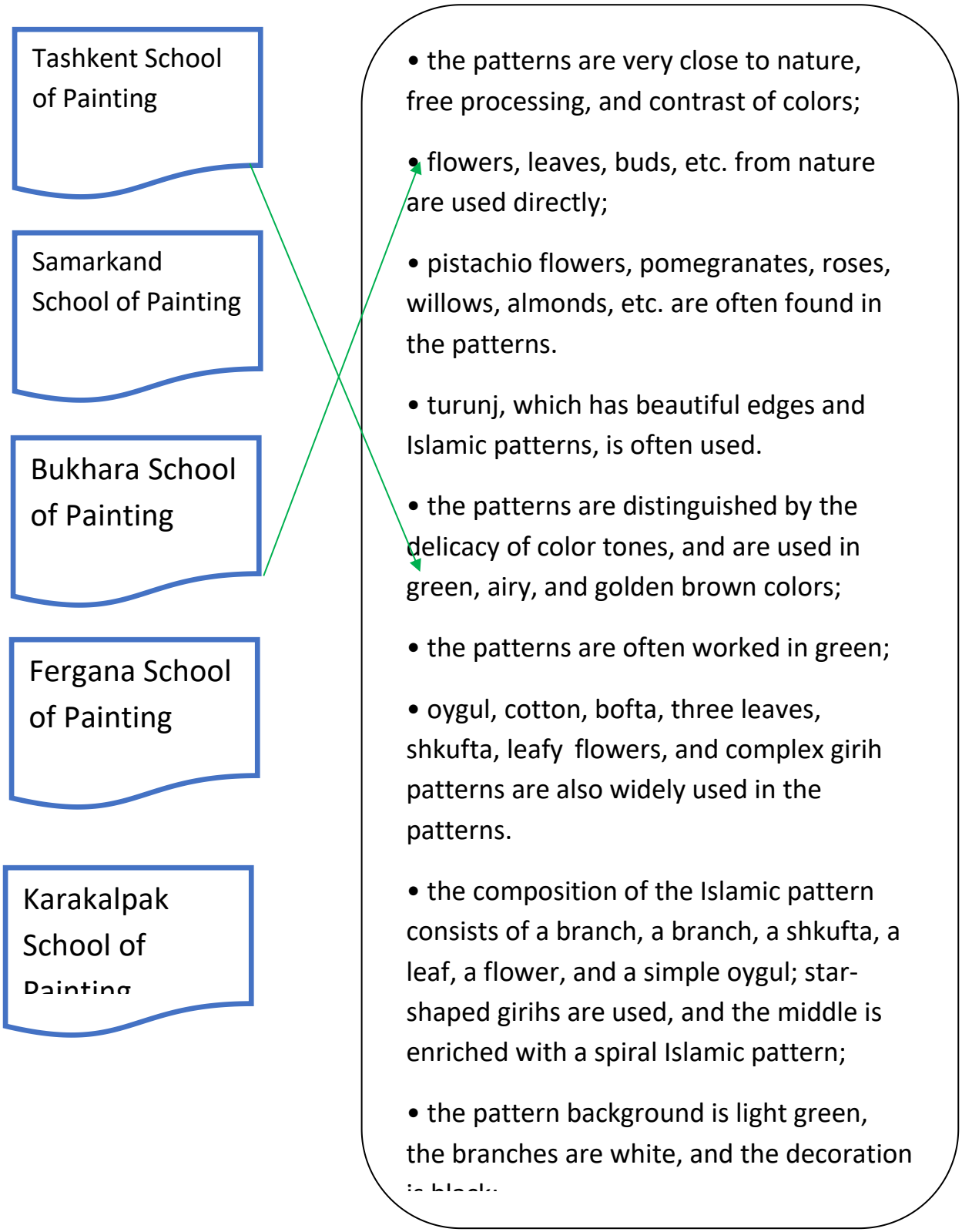
The integration of craftsmanship with modern technologies is ensured.

These aspects increase students' engagement in technology education, prepare them for their future

plays an important role in guiding people to make a conscious choice of profession [4.,,4 b].

Using the above methods, we can create Puzzle Tests to reinforce student knowledge: **Creating Puzzle Tests:**

1. Identify the patterns and color palettes characteristic of the schools of painting. Match the corresponding points.


Tashkent School of Painting
Samarkand School of Painting
Bukhara School of Painting
Fergana School of Painting
Karakalpak School of Painting
• the patterns are very close to nature, free processing, and contrast of colors;
• flowers, leaves, buds, etc. from nature are used directly;
• pistachio flowers, pomegranates, roses, willows, almonds, etc. are often found in the patterns.
• turunj, which has beautiful edges and Islamic patterns, is often used.
• the patterns are distinguished by the delicacy of color tones, and are used in green, airy, and golden brown colors;
• the patterns are often worked in green;
• oygul, cotton, bofta, three leaves, shkufta, leafy flowers, and complex girih patterns are also widely used in the patterns.
• the composition of the Islamic pattern consists of a branch, a branch, a shkufta, a leaf, a flower, and a simple oygul; star-shaped girihs are used, and the middle is enriched with a spiral Islamic pattern;
• the pattern background is light green, the branches are white, and the decoration

Results and Discussion

During the experimental work, the training sessions based on the pedagogical model had a significant impact on the development of students' operational competencies. At the next stage, the indicators of the control (N) and experimental (T) groups were compared.

Table 1. Comparative analysis of the level of operational competence (by stages)

Groups	Initial (%)	Average (%)	High (%)
Control group	34%	52%	14%
Experiment group	28%	46%	26%

Note: The number of students with high scores was low in both groups at baseline. The experimental group showed a significant increase after being taught using the model.

Figure 1. Dynamics of change in the level of competence

(You can use the description below instead of a drawing for an educational article. If you need an actual graphic, I can create one.)

Competency level (%)

↑

100 |

90 | *

80 | *

70 | *

60 | *

50 | * *

40 | * *

30 | * *

20 | *

10 | *

0 |----------

Initial Final

Control Experience

Graph analysis: It shows that the number of students with high levels of competence in the experimental group ultimately reached 26%, while in the control group this figure remained at

only 14%.

Discussion

The results of the experiment show that the step-by-step organization of embroidery practice based on the developed pedagogical model is an effective tool for the formation of operational competencies. The following factors played an important role in this:

Direct implementation experience was gained through practical training;

Based on modeling, student activity was guided step by step;

An individual approach was ensured through mentor-student mechanisms;

The self-assessment elements served to strengthen competence.

The results showed that the experimentally implemented model yielded significantly higher results than the traditional approach, which indicates the possibility of widespread implementation of this pedagogical model in the vocational education system.

Conclusion

The pedagogical model developed during the research proved to be an effective tool in engaging students in embroidery activities and developing their operational competencies. Experimental work conducted on the basis of the model showed that:

Students' skills in performing embroidery practice, mastering technical techniques, analyzing errors, and working on themselves have significantly improved;

The components of the pedagogical model - goal-oriented, content-oriented, activity-oriented, and outcome-oriented stages - worked in harmony with each other;

Compared to traditional methods, higher results were achieved in groups trained based on the innovative model;

An individual approach to embroidery, a mentor-apprentice system, and approaches based on practical training served to in-depth formation of operational competencies.

This model can be implemented in vocational education, folk craft schools, and higher education institutions specializing in crafts.

Recommendations

1. Updating educational programs

Embroidery courses need to develop competency-based curricula based on practical exercises.

2. Creating methodological guides based on the model

Lesson plans, training scenarios, and demonstration materials should be developed to develop operational competence.

3. Expanding cooperation with master craftsmen

It is advisable to organize practical lessons, master classes, and seminars with the participation of masters working in the field of embroidery.

4. Holding professional competitions and exhibitions

Motivation can be increased by organizing embroidery competitions and exhibitions among students.

5. Implementation of a monitoring and analysis system

Diagnostic tools should be developed that assess students' level of professional development and operational skills.

6. Combining embroidery with digital technology

Integrating embroidery with modern IT solutions (graphic design, pattern design programs) will serve to train competitive specialists in the future.

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