USE OF INNOVATIVE PEDAGOGICAL TECHNOLOGIES IN THE EFFECTIVE ORGANIZATION OF DRAFTING LESSONS

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Annotation: The article analyzes the effectiveness and methodological aspects of applying innovative pedagogical technologies in teaching drafting. Innovative approaches help organize the educational process in an engaging, interactive, and visual way, thereby promoting the development of students' creative thinking, technical skills, and independent learning activity.

Keywords: drafting, innovative pedagogical technologies, effective organization of lessons, multimedia tools, project-based learning, interactive methods, creative activity, educational process

Introduction

Teaching drafting based on innovative technologies not only enhances students' technical knowledge but also plays an important role in developing their creative thinking, spatial imagination, and practical skills. The interactivity of instruction is one of the main methods for stimulating students' cognitive activity and increasing learning efficiency through interaction. Usually, interactive methods (from the English interaction) are considered pedagogical tools and form an integral part of educational content.

An interactive lesson is one in which the teacher and students actively participate and cooperate throughout the process. These methods help students develop independent thinking, free reasoning, decision-making skills, emotional self-control, as well as critical and creative thinking. It should be noted that studying the basics of drafting in the 8th grade helps students acquire skills in working with geometric figures, projection methods, and lines, while developing technical thinking and drafting culture — essential for social and technological progress.

During this stage, the use of innovative technologies significantly improves the effectiveness of visual and interactive learning. Based on innovative educational technologies, the formation of knowledge, skills, and abilities of 8th-grade students in drafting includes the following objectives:

- Introduction to the basic elements of drafting;
- Development of skills in reading and constructing 2D drawings;
- Performing practical assignments using modern digital tools;
- Formation of students' independent thinking and problem-solving abilities.

DIRECTIONS FOR USING INNOVATIVE EDUCATIONAL TECHNOLOGIES

1. ICT (Information and Communication Technologies)

- Use of AutoCAD LT programs (for simple shapes appropriate to the 8th-grade level);
- Creating electronic drawings using Google Jamboard, PowerPoint, or Sketch.io;
- Drawing in real time using an interactive whiteboard.

2. Interactive Teaching Methods

- Interactive tests;
- Game "Find the familiar shape" – breaking down complex shapes into simple ones;
- Assignments via QR codes and checking answers through mobile devices.

3. Task-Based Learning. For example: "Create a drawing of a simple furniture part" – students make a drawing based on a real-life object. Teaching drafting to 8th-grade students using innovative technologies is considered effective, as it develops visual abilities, makes lessons engaging and productive, and provides a stage of professional preparation through real-life-based assignments.

Brainstorming Method Among the widely used methods, special attention is given to the brainstorming method - a technique for generating ideas. It involves collecting free thoughts and suggestions from students to find the optimal solution to a problem.

THIS METHOD CREATES CONDITIONS FOR IDENTIFYING SPECIFIC VALUES AND SELECTING ALTERNATIVE IDEAS ON A CHOSEN TOPIC. THERE ARE TWO FORMS OF BRAINSTORMING: **ORAL** AND **WRITTEN**.IN THE ORAL FORM, EACH STUDENT EXPRESSES THEIR THOUGHTS ON A GIVEN QUESTION CONCISELY AND CLEARLY. IN THE WRITTEN FORM, RESPONSES ARE RECORDED ON CARDS, WHICH ARE THEN DISPLAYED ON THE BOARD (USING MAGNETS) OR A PINBOARD (USING PINS). THE WRITTEN FORM ALSO ALLOWS GROUPING RESPONSES BY SPECIFIC CHARACTERISTICS.

When applied correctly and positively, this method teaches learners to think freely, creatively, and unconventionally. It helps students find several original solutions to various problems during lessons. The main goal of the method is to encourage students to think broadly and deeply about a problem, assess their activity, and stimulate a creative approach.

Rules for using the method:

- Encourage participants to think actively about the problem and generate unexpected logical ideas;
- Reward the number of ideas suggested by each student to help select the best solutions;
- Allow each student to rely on their own ideas and modify them when necessary.

The systematization, classification, and refinement of proposed ideas create conditions for the formation of scientifically grounded thoughts. Monitoring students' activity by rigid standards is excluded to avoid suppressing their creativity.

Conclusion. Modern education requires an interactive approach based on teacher–student cooperation, which facilitates the improvement of educational quality and the preparation of future teachers. Therefore, future educators must lay a foundation for the effective application of innovative methods. The use of modern pedagogical and information technologies in the learning process contributes to the development of independent and creative thinking, research skills, analytical abilities, and effective use of scientific literature. Moreover, it increases students' motivation for learning, their interest in the subject, and their commitment to their chosen profession. The brainstorming method develops creative and non-standard thinking, stimulates collaborative problem-solving, and divides the process into stages: idea generation, critical evaluation, and constructive refinement. It is used in competitions, debates, training sessions, and other interactive

techniques, enhancing students' engagement, enthusiasm, and freedom to express opinions.traditional methods have become outdated and do not meet modern educational demands.

REFERENCES

1. Karimov, S. *Use of Multimedia Tools in Organizing Drafting Lessons*, *Pedagogy Journal*, 2019.
2. Abdukarimov, R. *Pedagogical Innovations and Their Effectiveness*, Tashkent, 2020.
3. Inomjonovna, R. I. (2023). STEAM EDUCATION IS ONE OF THE MAIN TRENDS IN THE WORLD. *Journal of new century innovations*, *21*(2), 27-32.
4. Inomjonovna, R. I., & Xolmirzayevna, X. N. (2023). TYPES, METHODS AND METHODS OF TEACHING VISUAL ACTIVITY KNOWLEDGE AND APPLICATION. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, *14*(3), 92-97.
5. Inomjonovna, R. I. (2023). PSYCHOLOGICAL CHARACTERISTICS OF PICTURE ACTIVITY IN EDUCATIONAL PERSONALITY. *Journal of new century innovations*, *22*(1), 113-118.
6. Inomjonovna, R. I. (2023). HUMAN CAPABILITIES-SOCIAL DEVELOPMENT IS A PRODUCT. *Journal of new century innovations*, *22*(1), 119-124.
7. Inomjonovna, R. I. (2023). DEVELOPMENT OF CREATIVE ABILITY AND IMAGINATION IN CHILDREN. *Journal of new century innovations*, *22*(1), 108-112.
8. Inomjonovna, R. I. (2023). ART AS A COGNITIVE ACTIVITY IN THE LIFE OF CHILDREN. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, *14*(4),132-137.
9. Inomjonovna, R. I. (2023). INFLUENCE OF INNOVATIVE IDEAS ON HUMAN PSYCHOLOGY IN TEACHING PAINTING TECHNIQUE THROUGH ART THERAPY. *Finland International Scientific Journal of Education, Social Science & Humanities*, *11*(2), 126-134.
10. Inomjonovna, R. I. (2023). FACTORS FOR THE DEVELOPMENT OF IMAGING SKILLS OF PRESCHOOL CHILDREN. *THE THEORY OF RECENT SCIENTIFIC RESEARCH IN THE FIELD OF PEDAGOGY*, *1*(5), 74-79.
11. Inomjonovna, R. I. (2023). TRANSPERSONAL MODEL IN ART THERAPY-AS HUMANITY PRINCIPLES. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, *16*(4), 173-181.
12. Inomjonovna, R. I. (2023). ART THERAPY AS AN EFFECTIVE TREATMENT FOR INJURED CHILDREN (During war, violence, natural disasters). *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, *16*(4), 182-188.
13. Рахматова, И. И., & Таджиева, М. Ю. (2023). ОБУЧЕНИЕ ДЕТЕЙ СОЗДАВАТЬ ТВОРЧЕСКИЕ МОДЕЛИ ИЗ РАЗНЫХ РАСТЕНИЙ. *THE THEORY OF RECENT SCIENTIFIC RESEARCH IN THE FIELD OF PEDAGOGY*, *1*(6), 1-7.
14. Рахматова, И. И., & Чутбоева, М. А. (2023). ПОКАЗАТЕЛИ ХУДОЖЕСТВЕННО-ТВОРЧЕСКОГО РОСТА И РАЗВИТИЯ ЭСТЕТИЧЕСКОГО ЧУВСТВА ДЕТЕЙ. *THE THEORY OF RECENT SCIENTIFIC RESEARCH IN THE FIELD OF PEDAGOGY*, *1*(6),8-15.
15. Рахматова, И. И. (2023). УЧЕНИЯ О ЗДОРОВЬЕ ЧЕЛОВЕКА И ПРИРОДЕ С ИСПОЛЬЗОВАНИЕМ НАСЛЕДИЯ АБУ АЛИ ИБН СИНЫ. *THE THEORY OF RECENT SCIENTIFIC RESEARCH IN THE FIELD OF PEDAGOGY*, *1*(6), 207-215.
16. Inomjonovna, R. I., & Vofoqulovna, B. D. (2023). UZBEKISTAN IS A CENTER OF SCIENCE, ENLIGHTENMENT AND CULTURE. *THE THEORY OF RECENT SCIENTIFIC RESEARCH IN THE FIELD OF PEDAGOGY*, *1*(6), 199-206.
17. Inomjonovna, R. I. (2023). THE IMPORTANCE OF USING ART, ARTISTIC CREATIVITY AND ART THERAPY IN PREVENTING AGGRESSION IN CHILDREN. *Finland*

International Scientific Journal of Education, Social Science & Humanities, *11*(6), 383-389.

18. Рахматова, И. И. (2023). ФОРМИРОВАНИЕ КУЛЬТУРЫ АРТ-ТЕРАПИИ ЧЕРЕЗ ИНТЕГРАЦИЮ ИСКУССТВА. *Innovative Development in Educational Activities*, *2*(18),33-39.
19. Raxmatova, I. (2023, December). CURRENT ISSUES IN THE USE OF ART, ARTISTIC CREATIVITY AND ART THERAPY. In *INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE on the topic:"Priority areas for ensuring the continuity of fine art education: problems and solutions"* (Vol. 1, No. 01).
20. Рахматова, И. И. (2023). АКТУАЛЬНЫЕ ВОПРОСЫ ИСПОЛЬЗОВАНИЯ ИСКУССТВА, ХУДОЖЕСТВЕННОГО ТВОРЧЕСТВА И АРТ-ТЕРАПИИ. *Science and innovation*, *2*(Special Issue 14), 463-467.
21. Raxmatova, I. I. (2023). AGRESSIVLIKNI OLDINI OLISHDA SAN'AT, BADIIY IJODKORLIK VA ART-TERAPIYADAN FOYDALANISHNING AHAMIYATI. *Oriental Art and Culture*, *4*(5), 208-215.
22. Raxmatova, I. I. (2024). BO 'LAJAK TASVIRIY SAN'AT O 'QITUVCHILARIDA ART-TERAPIYA MADANIYATINI SHAKLLANTIRISHNING PEDAGOGIK-PSIXOLOGIK JIHATLARI. *Inter education & global study*, (4 (1)), 343-348.
23. Inomjonovna, R. I., & Xolmirzayevna, X. N. (2023). TYPES, METHODS AND METHODS OF TEACHING VISUAL ACTIVITY KNOWLEDGE AND APPLICATION. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, *14*(3), 92-97.
24. Inomjonovna, R. I. (2023). PSYCHOLOGICAL CHARACTERISTICS OF PICTURE ACTIVITY IN EDUCATIONAL PERSONALITY. *Journal of new century innovations*, *22*(1), 113-118.
25. Inomjonovna, R. I. (2023). HUMAN CAPABILITIES-SOCIAL DEVELOPMENT IS A PRODUCT. *Journal of new century innovations*, *22*(1), 119-124.