

Using a Non-Traditional Method in Teaching Drawing Geometry

R. A. Tanjarova, R. M. Mambetov, S. G. Dosmetov
Tashkent State Technical University Almalyk Branch

Annotation: This article describes an example of one subject using a non-traditional method of teaching the science of drawing geometry. Tests were also created without leaving the selected subject and the possibilities of providing students with in-depth knowledge based on this subject were identified.

Keywords: Graphics, imagination, memory, resource, design, projection, spatial, didactic, ability, process.

In the last 10-15 years, the use of interactive methods in the organization of the educational process has been widely implemented in higher education institutions. It is necessary to understand the meaning of this word when answering the questions: "What methods are considered interactive methods? What are their differences from other methods?" it is defined as follows: 1) an intermediate state. Located in the middle. In the middle; 2) commonality, universality, interdependence." If we draw a conclusion from these definitions, in the process of communication, mutual acceptability, mutual activity, dependence, mutual support, filling, and correction are the basis of interactive methods.

When using interactive methods, it is required that the content of the educational material be reworked by the teacher, he should explain the terms that seem complicated to the student, awaken and strengthen his intellectual activity in his mind.

Currently, the wide application of pedagogical innovations in the educational process has become a global trend of world development. In the second half of the 20th century, the concept of "innovative education" began to be used in the field of education. The main goal of innovative education is to create a sense of responsibility for the future and self-confidence in students. The concept of "technology" in a broad sense covers the processes of product creation as a result of all human anthropogenic activities. Technique and technology, industry and transport, mechanical engineering and aviation, chemistry and metallurgy, medicine and pharmaceuticals, agriculture and animal husbandry, in general, the work of creativity and the set of methods, methods, tools and processes are used on an unlimited scale to this day. the content and essence became wide-ranging. Traditional and non-traditional, historical, classical, new and modern types of technology used for pedagogical processes are distinguished. Taking into account that the main goal is the education and training of a person and his mental and physical development, regardless of what it is called, pedagogical technology should be meaningfully embedded in the concept of a perfect person.

"Pedagogical technology is a consistent method of creation, implementation and determination of all processes of teaching and knowledge acquisition with the help of technical and human factors and their joint actions aimed at accelerating forms of education".

Modern pedagogical technologies are a set of new forms, methods and tools of the educational process, which are integrated into one system based on scientific, theoretical and methodical. In this case, the integrity of the goal, task, activity and pedagogical result is ensured in the combination of new content, form, method and means, and the educational process that guarantees the achievement of educational goals is designed and implemented.

Classes using modern technologies are aimed at students to search for the acquired knowledge by themselves, study and analyze independently and draw their own conclusions. In this process, the teacher creates conditions for the development, formation, learning and upbringing of the individual and the team, at the same time, he

performs the task of management and guidance. In such an educational process, the student becomes the main figure. The correct implementation of pedagogical technologies in the educational process leads to students acting as the main organizers or consultants in this process. This requires more independence, creativity and willpower from them.

The main interactive methods used in higher education: Brain attack method, disputes, negotiation, presentation, pinbord, incident, chain method, cluster, projects method, boomerang, communication.

The essence of this teaching method is that the discussion or educational conversation is connected with the practical method. Its advantage functions are developing and educational task: students develop a culture of communication and discussion, the ability to express their opinion not only verbally, but also in writing, and the ability to think logically and systematically.

In the teaching of this subject, each topic has been strengthened by giving more graphic problems. Through correct graphic problems, the student learns to draw pictures beautifully and cleanly. In addition, aesthetic education is formed in the student at the same time. Therefore, not limited to a uniform teaching method, based on the needs of the times, the use of non-traditional methods will not be without benefits.

Creation of educational and methodological resources, didactic tools and materials, electronic educational resources, which ensure independent learning and learning of students, as well as implementation of control, aimed at developing students' creative abilities, is becoming a daily requirement. Therefore, it is possible to achieve good results in the teaching of drawing geometry by using a non-traditional method, i.e. based on tests consisting of words without graphic images. We are far from ruling out graphical issues with this method. The goal is to introduce a non-traditional way of teaching students this subject more deeply.

For this purpose, you can select any topic from the subject of drawing geometry and create 10 to 20 tests based on this topic. As an example, we will create tests on the topic "Projection methods" and consider them as an example. For this purpose, tests will be made without leaving this topic. It is appropriate if the test is structured in order of complexity from simplicity. For example, it is suitable if it is in the following order.

Depending on the size of the subject, 10 to 20 tests can be made on one subject. Each test has four answers, one of which must be the correct answer. The student must find the correct answer.

In conclusion, through this non-traditional teaching method, it is possible to provide students with the best possible knowledge of "Diagram geometry". If each topic is tested in the above order and finally summed up, it can be a good study guide for students.

At present, most methodologists and pedagogues-scientists believe that pedagogical technologies fully guarantee the achievement of the intended goal in providing education to pupils or students. But such opinions cannot be accepted as an objective truth, since the subject is a person, whose mind cannot fully accept the proposed technology, and on the contrary, it can reject it. Therefore, when introducing innovative educational technologies into the educational process in higher education institutions, only the professor-teacher, who is its manager, is the main guarantor of achieving the intended goal. If we look at it from this point of view, it is necessary to prioritize the level of preparation of the professor-teacher, who is its manager, in the introduction of innovative educational technologies and modern pedagogical technology and information and communication technologies, which are its main basis. Therefore, the positive or appropriate solution of most of the current problems of pedagogical processes depends on the teacher's professional potential and pedagogical skills.

Therefore, innovative educational technologies have several bases, the most important of which are social, philosophical, methodological, didactic, pedagogical, psychological, physiological, hygienic, ideological, legal-normative, economic, historical, theoretical, practical and other bases. Therefore, studying the problems of

applying innovative educational technologies in the higher education system is of theoretical and practical importance. This, in turn, confirms the relevance of the researched problem.

Summarizing the above and other principles, each innovative educational technology has its own theoretical and practical foundations. They are determined according to specific goals, tasks, content, form, method, and means.

References:

1. "Drawing geometry". I. Rakhmanov Teacher's Publishing House. 1998.
2. A collection of problems from the science of drawing geometry. R. Khorunov. Educational edition. 2002.
3. Nurmatova, M. (2021). Family economy: Sources of income and types of costs. *Asian Journal of Research in Business Economics and Management*, 11(11), 69-73.
4. Ilxamovna, N. M. (2022, December). Zamonaviy ta'limda iqtisodiy fanlarni o'qitish usullari tahlili. In *E Conference Zone* (pp. 79-81).
5. Расулов, И. И. (2021). Фразеологические единицы русского и узбекского языков со значением качественной оценки лица. In *Система непрерывного филологического образования: школа–колледж–вуз. Современные подходы к преподаванию дисциплин филологического цикла в условиях полилингвального образования* (pp. 420-423).
6. Inamovich, R. I. (2021). The Concept of "Community/World" in the Linguistic and Cultural Aspect. *Middle European Scientific Bulletin*, 16.
7. Расулов, И. И. (2016). Наречные фразеологизмы русского языка с имплицитно выраженным значением. In *Молодежь и наука: реальность и будущее* (pp. 275-277).
8. Расулов, И. И. (2016). Особенности учебного перевода фразеологических сочетаний. In *Молодежь и наука: реальность и будущее* (pp. 330-332).
9. Расулов, И. И. (2019). О применении кейс-метода в учебном процессе. In *Молодежь и наука: реальность и будущее* (pp. 464-467).
10. Хамзаевна, Р. М. (2021). Современные педагогические технологии на уроках русского языка. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 7(4), 148-150.
11. Мирзаюнусова З. И. Расулова М. Х. (2011) Роль образа исторической личности в воспитании гармонично развитой личности. *молодежь и наука: реальность и будущее* Материалы IV Международной научно-практической конференции, (572-573)
12. Kiramidinovna, I. D. (2021). Improving the Mechanism of Formation of Students' Creative Abilities. *European Scholar Journal*, 2(11), 106-108.
13. Rukhiddinovna, N. Y., Dadamirzaevich, I. D., Usubjanova, D. M., & Kiramidinovna, I. D. (2020). Methodology of the formation of general vocational training in students of higher educational institutions on the basis of competency approach. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(6), 3663-3679.
14. Inamidinova, D. K., & Soliev, D. (2022). INNOVATIVE TECHNOLOGIES IN TEACHING STUDENTS OF TECHNICAL HIGHER EDUCATION. *Journal of Pharmaceutical Negative Results*, 2423-2427.
15. Kiramidinovna, I. D., & Diyora, A. (2023). IMPORTANCE OF FORMATION AND DEVELOPMENT OF CREATIVITY SKILLS AMONG STUDENTS IN TEACHING GENERAL TECHNICAL SUBJECTS. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH* ISSN: 2277-3630 Impact factor: 7.429, 12(03), 39-41.