METHODOLOGY OF USING PEDAGOGICAL TECHNOLOGIES IN ORGANIZING PRACTICAL TRAINING

Sultanova N.B.

Associate Professor of the Department of Geography at the National Pedagogical University of Uzbekistan named after Nizami

Abstract: This article describes the problems of methodological preparation of students in the preparation of future geography teachers in higher pedagogical institutions, the formation of practical skills of future teachers through the use of pedagogical technologies and the organization of the educational process using them in each lesson. Also, the methodology of using game exercises of didactic game technology is revealed on the example of one subject.

Keywords: Geography, education, professional training, pedagogical technology, practical training, General Geography, game exercises, geography teacher.

МЕТОДИКА ИСПОЛЬЗОВАНИЯ ПЕДАГОГИЧЕСКИХ ТЕХНОЛОГИЙ В ОРГАНИЗАЦИИ ПРАКТИЧЕСКИХ ЗАНЯТИЙ

Султанова Н.Б.

Доцент кафедры географии и методики ее преподавания национального педагогического университета Узбекистана имени Низами

Аннотация: В данной статье изложены проблемы методической подготовки студентов при подготовке будущих учителей географии в высших педагогических заведениях, формирования практических навыков будущих учителей посредством использования педагогических технологий и организации учебного процесса с их использованием на каждом уроке. Также на примере одного предмета раскрыта методика использования игровых упражнений дидактической игровой технологии.

Ключевые слова: География, образование, профессиональная подготовка, педагогическая технология, практическое обучение, общая география, игровые упражнения, учитель географии.

The introduction of modern educational technologies into geography education, ensuring mutual cooperation between teachers and students in the educational process, and developing students' skills in independent knowledge acquisition, independent and creative thinking are important tasks facing education. Educational institutions, including higher pedagogical universities, play an important role in their implementation.

To implement the above-mentioned tasks, first of all, teachers teaching in educational institutions, including geography teachers, must have methodological training and skills in using them, along with theoretical knowledge. Therefore, it is advisable to form the practical skills of future teachers by organizing the educational process using them in each lesson, along with teaching the scientific and theoretical foundations of pedagogical technology as a separate subject in higher educational institutions that train teachers.

Some of the tasks of pedagogical technologies used in preparing future geography teachers for pedagogical work are as follows:

• Developing critical thinking: The ability to analyze information, evaluate evidence, put forward hypotheses and draw conclusions.

• Developing creative thinking: The ability to generate new ideas, find innovative solutions and demonstrate creativity.

• Developing problem-solving skills: Developing the skills of setting goals, analyzing situations, developing an action plan and making decisions.

• Teaching independent learning: Developing the ability to independently search for information, learn from mistakes, adapt to new conditions and apply the knowledge gained in practice.

• Developing teamwork and communication skills: The ability to communicate effectively with others, share information, listen and understand the points of view of others.

• Increased interest in science: The use of new technologies such as multimedia textbooks, interactive programs, online courses, etc. helps make education more attractive and fun for students.

As can be seen from the above, pedagogical technology is based on principles that develop education and educate a complete person. In this case, the educator (teacher) and the learner (student) are at the center of the pedagogical process, and the mutual cooperation and communication between them must meet modern requirements [3,7].

Through a lesson organized on the basis of pedagogical technologies, students quickly and easily absorb the theoretical information provided, understand the content and essence of the laws, causes and effects, and arguments related to the subject. With the help of various technologies, the knowledge acquired by students through independent thinking and observation is retained in their memory for a long time, and they also master the features of modern pedagogical technologies, become aware of their use, and develop and develop knowledge, skills, and competencies for use in their future activities [10].

To do this, the teacher must first of all be armed with the requirements for organizing the educational process, the forms of organizing education and management principles, the use of methods that serve the mental and physical development of the student, the correct organization of the student's personal activity towards reading and learning, the ability to communicate with them, the ability to resolve problems and conflicts that arise in the process of organizing pedagogical activity, the ability to organize a productive and creative atmosphere in the classroom, and the ability to accurately and accurately assess educational activity [2,8].

Therefore, the urgent issue of today's education is to create conditions that will allow the younger generation to master the basics of science so that it does not lag behind scientific and technological progress. This leads to the need to select the content and volume of education taking into account individual and age characteristics of students, to adapt it to the capabilities of students, to adapt it to the capabilities of students, to inform and educate them, to develop their minds, and to direct them to a profession.

As a result of the conducted experimental work, it was found that there is a great potential for the use of pedagogical and information technologies in organizing practical exercises that will help students work freely and independently in general geography classes.

In the course of our research, it was found that in order to organize the cognitive activity of students in General Geography and improve the methodology of vocationally oriented teaching, it is advisable to first use pedagogical technology at a certain stage of the lesson at the local (module) level. In this case, first a new topic is studied, then control tests, various game exercises, competitions, trainings are held to control and evaluate the knowledge, skills and qualifications acquired by students. After students engage in this activity and acquire certain skills and qualifications, it is advisable to conduct lessons based on pedagogical technologies, that is, to use it at a private methodological level.

In technologies of a special methodological level, all stages of the lesson are organized on the basis of the requirements of pedagogical technology, that is, the process of studying a new topic is completely based on a certain type of pedagogical technology (modular learning, cooperative learning, problem-based learning, didactic games, etc.). For example, the topic “The Solar System. The shape and movements of the Earth. Their geographical consequences”. In this case, proceeding from the educational, educational and developmental goals of the topic being studied, the teacher must determine which technology to use in the educational process, the specific aspects of organizing students' cognitive activity

on its basis, the educational tasks that students must complete in the lesson, and the ways to control and evaluate the acquired knowledge.

In order to improve the methodology of vocational training of students in practical classes in General Earth Science, we organized practical training classes on pedagogical technologies such as didactic games, modular learning, collaborative learning technologies, and some types of interactive methods. Below, we will discuss the importance of didactic game technology in increasing the effectiveness of lessons and vocational training.

In the system of pedagogical technology, didactic game technology occupies a special place. In the educational process, they are used in the form of didactic game lessons. In lessons organized on the basis of didactic game technology, the process of students' learning is combined with game activity. Therefore, lessons that combine students' learning activity with game activity are called didactic game lessons [5];

Many scientists have conducted research on the use of games in geography lessons, and they have discussed the role and importance of didactic games: L.M. Pancheshnikova, S.N. Praslova, G.A. Ponurova, L.V. Belyaeva, G.Ya. Lisenkova, V.V. Pyatunin - as a form of problem-based learning, part of the lesson, a form of developing thinking; V.P. Korneev, Ye.G. Kolovsky, V.M. Lyantsevich, L.P. Simenova, A.V. Prokofiev - as a form of learning designed for a whole lesson, a form of developing interest in knowledge; V.I. Sereda, M.G. Zakharov, K.S. Momentova - as extracurricular work form or a condition for expanding the level of knowledge of the lesson, P. Musaev, R. Kurbanniyozov, V. V. Nikolina, G. S. Kulinch, O. Safarov, A. Khayitov, O. Mominov - a form of study and extracurricular activities that contribute to the comprehensive education, knowledge and development of students, M. Abdurakhmanov, B. Abdurakhmanov - a form of increasing the effectiveness of geography education, - they expressed the opinion [1]. They developed a methodology for organizing and conducting didactic games in geography lessons and extracurricular activities. Agreeing with

the opinions of the above scientists, in our opinion, didactic games are a form of increasing the effectiveness of education and developing practical skills.

We have determined the main features of geographical games used in improving the methodology of vocationally oriented training of students in practical classes in general geography as follows:

1. When a lesson is organized using geographical games, developing activity occurs in students. Students participating in this lesson freely choose the roles and tasks they will perform. For example, in expedition games, the ship's captain, observer, cartographers, sailors, and others.

2. In the process of lessons with geographical games, a creative atmosphere and controversial situations arise. During the geographical game, students are engaged in creative work in the process of performing a specific role and task, and if problematic situations arise, they solve them in cooperation. In the course of our research, it was found that didactic game lessons can fulfill such functions as education, personal development, directing students to creative activity, monitoring and analyzing knowledge, introducing and directing to professions, and developing a culture of communication and speech.

These functions are implemented in a complex way in the educational process, however, there are several types of didactic games, in which some function is dominant. For example, in conference lessons, personality development prevails, in game exercises, control and analysis of knowledge prevails, and the remaining functions complement them.

Didactic game lessons, depending on the combination of students' knowledge acquisition and game activity, include plot-role-playing games, creative games, business games, conferences, game exercises, etc. Each type of game has its own characteristics and plays a special role in guiding students to professional activity. For example, plot-role-playing games are aimed at studying the relationship between natural and socio-economic phenomena, events and

phenomena, while creative games are designed to help students solve a specific geographical problem based on their previously acquired knowledge.

Game exercises in didactic games are of particular importance in vocational education of students. The high effectiveness of this method was determined during the experimental testing conducted during our research.

The game exercise method of didactic game technology is also of particular importance in vocational education of students. We can also conduct individual didactic games on general Earth knowledge, setting up game exercises in the form of problems and exercises. This method of didactic games not only increases students' knowledge and interest in their profession, but also teaches them the methodology for using these methods in their future activities [9]. Game exercises on the topic "General information about the Earth" can be used as follows.

1. The angular velocity of the Earth's rotation, that is, the angle of rotation of a point on the Earth's surface for any given time, is the same for all latitudes. A point travels 150 times in one hour ( ). However, the velocity in meters per second varies with latitude and is calculated using the following formula:

$$\vartheta_э = \frac{2\,\pi R}{T}$$

Here, - the frequency of rotation, at the equator (second), - is the Pythagorean number, which is equal to 3.14 radians. 3.14 radians is equal to 1800. Knowing that the area of a circle is 3600, when we convert it to the Pythagorean number, i.e. radians, it is equal to (6.28). R-radius, T-time (second).

To solve this problem in the form of a game, the student should use the knowledge acquired in the following lecture on this topic. To solve this problem, the student must use his knowledge of the Earth's motion, that is, he must know the angular velocity of the Earth, the length of 10 arcs at the equator. The angular velocity of the Earth is 150 per hour, that is, the Earth travels a distance of 150 in one hour. The length of 10 arcs along the equator is 111.3 km. Based on the above formula, we calculate the speed of rotation of the Earth in 1 second at the equator as follows:

$$\vartheta_э = \frac{2\,\pi R}{T} = \frac{2 \times 3{,}14 \times R}{86400} = \frac{6.28 \times 6378{,}245}{86400} = \frac{40\ 055378{,}6}{86400} = 463{,}6 = 464\ m/sek$$

The value of 86,400 days in seconds is substituted for T in the formula. Therefore, the speed at the equator is 464 meters per second.

2. The width of the Atlantic Ocean at the equator is 600, how long will it take a spacecraft moving at the speed of the Earth to reach its shore from one coast to the other? To solve this problem in the form of a game, the student uses the knowledge acquired in the lecture on this topic. If the spacecraft is flying at ground speed, we divide the width of the Atlantic Ocean by the angular velocity of the Earth,

600:15=4. Then we calculate the distance:

60 x 111.3 km2 = 6678 km.

So, the ship will reach from one coast to the other in 4 hours. The width of the Atlantic Ocean at the equator is 6678 km [6].

By organizing game exercises like the above in accordance with the topics of General Earth Science, we will achieve the transformation of the knowledge acquired by students in the lecture into practical skills and the training of highly competent geography teachers. Because during game exercises: communication occurs between students at all stages of the learning process; students are given equal opportunities in the learning process to demonstrate their strengths, knowledge, and talents; a socio-psychologically favorable environment is created for students (individually or in small groups) to work together, and the ground is prepared for their gradual and effective participation in the conversation; students understand that in order to actively participate in the conversation, they need not only to hear, but also to analyze what they hear, think, and achieve the basis and clarity of their thoughts; By working together with students and mastering educational materials, they can achieve the required level of fulfillment of the tasks set, analyze the results obtained, check their accuracy, present and receive recognition from others [4]. The use of pedagogical technologies in the lesson

process allows students to form pedagogical characteristics such as a creative approach, logical thinking, the ability to express their thoughts independently and freely, self-assessment, work individually and in small groups, respect the opinions of others, select the necessary one from many opinions, and effectively use the learned knowledge in necessary conditions.

References:

1. Abdurakhmonov M., Abdurakhmonov B. Natural geography: interesting lesson forms. – Namangan: 2000 – 46 p.

2. Dmitrieva, M. S. Management of the educational process in a higher school. – Novosibirsk, 1971. –180 p.

3. Madumarov T., Kamoldinov M. Fundamentals of innovative pedagogical technology and its application in the educational process. – T.: Talkin, 2012. –176 p.

4. Mavlonov A. et al. Educational technologies in organizing learning activities. – T.: “Tafakkur Bostoni”, 2013. – 142 p.

5. Sultanova N.B. Some aspects of preparing future geography teachers for innovative pedagogical activities // Scientific information of the Tashkent State Pedagogical University. Scientific and theoretical journal. –Tashkent, 2024, No. 4, –B. 38-46.

6. Sultanova N.B. General Earth Science (practical exercises). –T.: Bookmany print, 2023. –282 p.

7. Tojiev M, Alimov A.Ya., Kuchkarov D.U. Application of pedagogical technology to the educational process: a project of training exercises. Part II. –T.: Tafakkur, 2010. –148 p.

8. Tolipov U, Usmonboyeva M. Applied foundations of pedagogical technologies. –T.: Fan, 2006. –262 p.

9. Tolipova Z.A. Pedagogical technologies in teaching biology. –T.: Chulpon, 2011. –114 p.

10. Zotov Yu.B. Organization of a modern lesson. – M.: Prosveshchenie. 2019 –150 pages.