



DISTINCTIVE FEATURES OF INTERACTIVE METHODS USED IN BIOLOGY LESSONS

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Abstract:: this article highlights the theory and practice of using interactive techniques that allow students to activate cognitive activity and improve educational efficiency in the process of teaching biology educational science. The role of interactive technologies in the development of students ' knowledge and skills, their importance in increasing motivation, and their role in improving the quality of Education have also been discussed.

Keywords: biology, interactive technology, learning process, innovation, teaching methodology

Introduction: today's modern education cannot be imagined without interactive techniques. Active methods that reveal the content of the lesson serve as practical support for both the student and the educator. [1].

In order for the teacher to activate the cognitive activity of students, it is advisable to identify the acquired knowledge, skills and competencies on the past topic, systematize them, control the acquired knowledge, skills and competencies on the new topic, and use directly interactive techniques in the assessment process [2].

Interactive teaching is a special organizational form of the development of cognitive activity, in the process of which the educational person is characterized by the transformation from an object of training to a subject of interaction and active participation in the educational process. Interactive teaching methods are considered in the process of modeling life situations, using role-playing games and solving problems in collaboration. Interactive teaching not only forms activity, creativity and independence in the process of mastering information from the audience, but also contributes to the full-fledged implementation of educational goals.[3] in addition, the role of ahborot Technologies is important to ensure survival in a natural way.

The use of models in students molecules their interaction, the stages of development of the Embryo 3D video recordings and mullions help to easily assimilate biological concepts and laws. However, in teaching visual concepts in high school and higher education institutions, the restriction to taking lessons based on images and posters using traditional techniques makes it difficult to produce a clear picture of the biological process and concepts. [4].

It is known that all science teachers are increasingly using interactive methods in the course of classes. Taking this into account, we are not mistaken to say that as a result of the application of interactive methods, students are developing and developing skills for independent thinking, analysis, drawing conclusions, stating their opinion, being able to defend it on the basis of it, healthy communication, discussion, debate. So what is the meaning of interactive methods and what is its significance? Above all, the interactive method serves to activate the students ' acquisition of knowledge, to develop their personal qualities by increasing the activity between students and the teacher in the educational process. We must understand that the use of interactive techniques helps to improve the effectiveness of the lesson. To carry out these processes, it is necessary to be modern shooters, the following peculiarities will be embodied in such shooters:

MODERN TEACHER 5 SKILLS

1. Knowledge of new technologies
2. Creating digital lesson resources
3. Applying a psychological approach
4. Finding an individual style for each student
5. Being motivational and inspiring [5].

Such educators strengthen internal motivation in students towards subjects and stimulate their active participation in the educational process.

It has long been known that our ancestors also conducted a lot of research on the development of education on the basis of pedagogical technologies. Great scholars of the East such as Moses al-Khwarazmiy, Ahmad al-Farghani, Abu Rayhon Beruniy, Mirzo Ulughbek, Abu Nasr Farabi noted in their works that they paid great attention to the use of various methods and means of training a person in achieving mental development in schools and madrasas. In the current educational system, new pedagogical technologies for the acquisition of knowledge are required – the use of non-traditional educational methods. Non-traditional educational technology: is divided into joint learning, experience, modeling and is carried out on the basis of an integrated system. The non-traditional method of education is the basis of cooperative activities between the educator and the educational person in the implementation of the educational goal. Currently, the development of Natural Sciences, differentiation between disciplines and the emergence of integration processes as objective legislation necessitates the implementation of an interdisciplinary connection between natural sciences, including Biology, Chemistry, Physical Sciences. The main tasks of biology (anatomy) education are to convey to students the scientific foundations of the structure of the human body, the function of the organ systems and their adaptation to vital processes, to explain the laws of anatomy and physiology, to develop competence to be able to apply this knowledge in such practical directions as the formation of a healthy lifestyle, personal hygiene, proper nutrition and Today's modern education is difficult to imagine without interactive techniques. Active methods that reveal the content of the lesson provide practical assistance to students and the teacher. In contrast to the traditional lesson, methods bring life into the course process, and most importantly develop the mind of the student. Now readers are not only able to adequately express their point of view to the public, but they also achieve independent thinking in the process.

It means that interactive methods are becoming the lifeblood of the lesson. Involvement in the lesson in 1 minute "method 3-4-5-6-7" this method is an easy method for repeating the mentioned topic and summing up the idea of explaining a new topic to the lesson process. It is implemented as follows: The question is asked: we will remember the topic that passed with you. Where do we see yesterday's lesson who has more left in mind?

2. You draw a 3-4-5-6-7 grid on the board or show the pre-prepared version if using a screen.

2. Find the words equivalent to the cells below within the subject mentioned. As soon as you give such an assignment, readers begin to click on a book, notebook, memory. Through this, the most important thing is that you can concentrate students on the lesson and be able to provide knowledge on a new topic.

New thematic knowledge for example, if the structure of the respiratory organs you need to pour out your information on the screen, which is written in a mapping way, so that in advance the base words of this topic are remembered more for example:

When mapping, define the central concept and write in a colored pen (black, green...) as "respiratory system organs", for example. This written concept will be the central point of the map. Highlight the main components and write them in a sequential column using a blue pen.

Organs of the respiratory system

1. Nose
2. Halkum
3. Hiccups
4. Kekirdak (Trachea)
5. Bronchi
6. Lungs (with alveoli)

It is the soda that makes the mapping the most effective in that writing the subject using a colored pen and with numbers makes it even more important to remember the melody.

Simply put, on the map each of the following tariff since you leave:

Nose function:

- 1) purifies the air,
- 2) heats the air
- 3) humidifies the air.

Trachea function:

- 1) glandular fluid in the mucous membrane of the icnki humidify the air
- 2) icnki hairy mucous membrane-dust retention out
- 3) Transfer air from the hiccups to the bronchi

Bronchi function:

- 1) warming the air
- 2) air humidification
- 3) cleaning from fine dust particles
- 4) transfer to the pulmonary alveoli

Lung function:

- 1) gas exchange with capillary blood vesse

In a more complex form of mapping, write "Respiratory System" in the center using a colored pen (black, green, etc.), and draw arrows from it. Depending on the number of the main components, they should also be written in a different colored pen (black or green, etc.) rather than blue. Each of them can be numbered in a column shape with a permanent blue pen, and you can write that each part is made up of specific components. Alternatively, the above information can also be written in the same manner. It is necessary to bring out the ready-made one to the screen at the moment when it will explain the new topic, and it is possible to make the lesson more interesting through the method below.

"Chachpalak" method.

Structure of the lesson:

1. Purpose of the lesson: 1. Explanation of the structure of the respiratory organs. 2. Learning the breathing process. 3. Understanding the biological importance of breathing in living organisms. 4. Develop students' skills in independent thinking and group work.

2. Materials: 1. Clean white sheets. 2. Pens (different colors for each group). 3. Whiteboard and markers.

3. Stages of the lesson:

Stage 1: Asking Students questions (step one) Readers are asked the question: "What do you know about the structure of the respiratory organs?"

Clean white sheets are provided to each subgroup (consisting of 4-5 people). Students themselves independently write answers about the structure of the respiratory organs.

Without all participants exchanging verbal opinions, each must write down his own opinion.

Stage 2: exchange of ideas among groups (step two)

The written sheets are transmitted every 2 minutes to another group by the movement of the miles of hours.

Once each group receives the sheet, they must add their own thoughts and new information, without repeating the existing information.

Groups use pens of different colors (e.g.: Group 1 Red, Group 2 Blue, Group 3 green)

Stage 3: completing the sheet (third step)

Once each group's sheet has returned to itself, the groups complete their thoughts and discuss the information each group has written.

In the discussion process, opinions are exchanged between groups and the most important information, new or unrepeatable opinions are analyzed

Stage 4: assessment by the teacher (Step Four)

The teacher writes the data each group wrote on the board.

The groups provide feedback and the teacher evaluates the work of the groups. Based on the input of each group, the teacher gives final grades and the winning team is determined.

Stage 5: final conclusion (fifth step)

The teacher summarizes the lesson and makes a final conclusion about the structure of the respiratory organs.

Mentions to readers the biological importance of the breathing process.

Questions asked to students (examples):

What are the main parts of the respiratory organs? What is the role of blood vessels in breathing?

What do you know about the biological importance of breathing?

What energy does the body generate in the process of breathing?

Tips to improve the effectiveness of the lesson:

The teacher should encourage active communication and exchange of ideas between groups.

It is necessary that each group tries to state its opinion in a clear and understandable way.

During the lesson, the teacher can more effectively organize interactive techniques by helping groups, making necessary comments and providing additional information.

In strengthening a new topic:

Give readers a blank map and ask to fill in the names of the organ and their function.

Or assign students to make a map, dividing it into groups.

Conclusions and suggestions. In conclusion, it is advisable to use it effectively in the process of organizing biology classes based on the interactive educational technologies presented above. Therefore, each teacher must have thoroughly mastered the integration of interactive methods, information and communication technologies and sciences.

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