

# USING INTERACTIVE METHODS THAT CONCENTRATE ATTENTION AND ELEVATE MOOD WHEN TEACHING PHYSICS

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**Abstract.** *In our republic, great importance is attached to the further development of the education system and the improvement of the pedagogical skills of teachers. In this article, recommendations are given on how to use some interactive methods that attract students' attention and raise their mood, and increase their enthusiasm for new knowledge during classes for young pedagogues.*

**Keywords:** *method, information, intellectual game, pedagogue*

**Introduction:** In today's technologically advanced era, to interest students and pupils in lesson processes, to draw their attention, requires high knowledge and skills from pedagogues. Social networks are so interesting to young people that they want to get hold of their mobile phones and use them even during the training if the lesson process does not attract the students' attention. In order to avoid such situations, today's teacher should always be far from teaching the same lesson, innovate, use different interactive methods and be inquisitive.

Currently, there are many methods that can be used in the teaching process, but it depends on the skill of the pedagogue to choose effective methods from among them, suitable for the subject of the lesson, and use them in a beautiful way. The pedagogue can come up with new methods or use the existing method with a slight modification. We will mention some methods that can be used in teaching physics.

1. Applying the "Information about mood" method in teaching physics.

Sometimes, when the pedagogue wants to start the lesson with high energy, the students are tired and unenthusiastic as a result of the previous lesson or for some other reason. There is a problem of attracting the student to the lesson, introducing him to the world of physics. It is effective to use the "Information about Mood" method to make this situation active and make students forget about various thoughts and dreams. For this, students are asked to express their mood through some physical concept. Of course, a student may ask how at first. Students are given the following as an example.

- I am very energetic today. I have a lot of passion for the lesson.
- I don't like the air pressure today. I'm a little sick.
- I came at high speed to get to class.
- My heart rate is high.
- I have a little fever. My temperature is 37°C.
- If I am free in the lesson today, the lesson under pressure will squeeze me.
- I'm ready for class. I have enough energy and strength.

When given examples like these, students begin to recall physical concepts to represent their situations and move from the external environment to the physical environment. A depressed student tries to explain his problems and the teacher gets information about the situation of the

students in the class. Cheerful and responsive young people will come up with old ideas, and the teacher will be able to use these ideas as an example in his lessons in other groups. Students' opinions collected during the training will enrich the sample part of the method. It is recommended to spend 3-5 minutes using the "Information about mood" method

2. Application of the "Intellectual game" method in teaching physics.

The effectiveness of using game methods in teaching is high. Because if there is a competition between students, they will try to show that their knowledge is superior to that of their opponent. In order to win the next games, they try to increase their knowledge during the lesson and independently. As one of such game methods, we will mention the "Intellectual Game" method. It is effective to use this method mainly for the purpose of repeating topics or asking for homework. In the intellectual game, the pedagogue can participate from 7 to 15 students, depending on his desire, and accordingly determine how many stages the game will consist of. Let's select 9 students as a sample. The game consists of 5 stages. In the 1st stage, each student is asked 3 quick and 1st difficulty questions. For example, if it is used to repeat the molecular physics section or to ask the topic covered in practical lesson processes, the following questions of difficulty level 1 can be asked:

- Basic rules of molecular kinetic theory?
- Give a tariff for 1 mole?
- Explain Avogadro's number?
- What is the process of explanation?
- 1st law of thermodynamics?
- 2nd law of thermodynamics?

Depending on the results, the 2 students who answered the least will be excluded from the game. In the 2nd stage, the game continues with 7 students, and the level of difficulty of the questions is slightly increased in this stage. Students will be asked 3 more questions, and depending on the results, 2 more students will be expelled from the game. If the results are the same, additional questions will be asked. 5 students will participate in the 3rd stage. At this stage, if the form of questions is slightly changed and questions are asked about formulas or graphs, students will not get bored of the sameness. For example:

- When the gas mass  $m$  and temperature  $T$  - do not change, draw a graph of the relationship between  $P$  and  $V$ .
- Draw a diagram showing the isobaric line.
- Draw the adiabatic line on the graph of the relationship between  $P$  and  $V$ .
- Write the formula for the useful work coefficient of heat engines.
- Write the formulas of application of the first law of thermodynamics to the isochoric process.

you can ask questions like in the 4th grade, 3 students can be given the task of deriving formulas. For example:

- Derive the basic equation of molecular kinetic theory.
- Derive the formula of mean square speed.
- How to express density in the basic equation of molecular kinetic theory.

Will be addressed with somewhat complicated questions, and depending on the answers, one student will be encouraged to take his place by encouraging good participation. The participants who have reached the finals will definitely be encouraged. At the final stage, in order to further increase the knowledge, skills and abilities of students in solving problems, it is

appropriate to provide a condition for solving problems. The winning student will be shown as an example to all students as the most active student of today's lesson. As a result, the winning student becomes more interested in science, and the rest of the students start working on themselves even more with the desire to win the game. The teacher will achieve his goal.

**Analyzes and results.** The methods presented in the sample were used in the practical training of physical science at the Institute of Agricultural Irrigation and Agricultural Technologies of the National Research University "TIAME". The method "Information about mood" was effective in establishing a good mood and friendly attitude among students throughout the lesson. The "intellectual game" method was able to be a real helper in keeping important knowledge such as physical quantities, concepts, laws, formulas, measuring instruments in the memory. It was also received with interest by the students. Students achieved high marks in knowledge assessment tests. Since the results are positive, we recommend the use of these methods to young pedagogues.

**Conclusion:** Compared to traditional methods, unconventional, different methods and technologies are used in conducting lessons, and lessons enriched with modern knowledge are effective in creating knowledge and skills in students. The methods presented in this article can be used in teaching other subjects. It is especially recommended as a methodical guide for young personnel who have just started their pedagogical activities. If the pedagogue enriches each lesson with new methods, the lesson will be met with interest by the students, and specialists with high knowledge and potential will develop in the higher education system.

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