FORMATION OF PHYSICAL REPRESENTATIONS IN SECONDARY SCHOOL STUDENTS

Ashirov Shamshiddin, Candidate of Pedagogical Sciences
Mamatov Abduraim., Urozbokov Alijon., Nizamov Alisher., Erjigitova Mahbuba., Fayzieva Shoir
Teachers, Gulistan State University (**UZBEKISTAN**)

ABSTRACT

This article provides information about the formation and formation of physical imagination in secondary school students.

Keywords: Physical knowledge, physical imagination, cones, hypotheses, consciousness, abstraction, psychological consciousness, philosophy, logic.

INTRODUCTION, LITERATURE REVIEW AND DISCUSSION

Physical knowledge is a system of representations, laws, hypotheses, and theories. Laws and theories are connections between fantasies. Imagination is a means of exploring the world around us. One of the most universal activities of the teacher — the formation of students ' physical imagination takes a large place. This is one of the most complex works that requires a deep knowledge of philosophy, logic, psychology and pedagogy.

Imagination is the main form of thinking. Every thought is expressed in the imagination. All other forms of thinking-judgments and conclusions-find content in the imagination. Imagination is both the Foundation and the apex of thought, the source material and the end result of judgments and conclusions.

Imagination is closely connected with the word: it is expressed in the word and fixed in it. The word is a material carrier of imagination. Imagination is the main and highest form of thinking that provides reflection in the minds of the main characters, their properties and relationships, separated by generalization and abstraction of phenomena and things of the material world.

How is the imagination formed in the human mind? As a thinker, will find the imagination? What is the mechanism of this process, its directions and main stages? These are first-level questions for the teacher.

Imagination is not formed suddenly in the human mind; in the individual mind, imagination is a long, endless process of becoming, of development; it has no boundaries, like the knowledge of the world.

The main source of imagination formation is the material world. Imagination about a specific body involves a lot of characters. By comparing it with another bodily imagination, certain signs are repeated in the second physical imagination. Here are the main characters common to all these bodies, which are strengthened in the imagination. Comparison, the search for similarities and differences, the release of properties and the separation of generalizations, generalization and abstraction are the simplest and at the same time the main mental operations (actions) of the process of forming the imagination. The process of moving from imagination to imagination is a great leap in quality, it is the birth of thought.

By comparing and comparing representations of bodies, the most common characteristic features that are distinguished by bodies are supported by the word. The result is an illusion.

This can be three main ways of forming the imagination.

1. Not yet formed in the child's mind, but based on his numerous personal images, new fantasies are introduced. For example, in grade 6, the concept of “mechanical movement"is introduced. In the mind of every child, many ideas about actions are embodied (train, plane, car, bird, etc.)... movements). The task of the teacher is to update these ideas in the reader's mind. This is done in the following way: first we ask the readers to give examples of the movement of different bodies. They will lead many examples. Then proceed to the analysis of these actions. We ask readers how these actions differ from each other, what commonality and similarity they have. Additional questions are used to determine the differences in the movement of bodies: whether the speed, length of the path, time of movement, and direction of movement differ. There is only one common death (sign): movement, change of place, spatial position of the body. In this way, readers understand the content of mechanical movement. This is the initial stage of mastering the imagination.
2. When forming a new imagination, in which the student does not have imagination, the teacher begins to demonstrate the experience and begins to form the imagination based on it.
3. Students may have a misconception about some phenomenon or imagination (very rarely). The correct formulation of such ideas is not an easy task for a teacher. It is conducted with the help of experience and evidence from the results of numerous observations (for example, readers ' illusions about lightning, abundance).

The three paths considered are considered the first stage of imagination formation, which is introduced based on the readers ' imagination. In this case, the formation of the imagination does not end, it goes to the second stage, that is, such an imagination deepens and develops, describes, considers the connection with other fantasies.

Now let's look at what will be the method of discussion in the formation and development of the imagination. Studying mechanical movement, students, telling various examples, give an idea that one (for example, an airplane) flies faster than another (birds), its directions may be different, and the passing paths are also different. Through this discussion, information will be obtained about whether the action is a physical phenomenon and the speed, direction, and path taken are its main characteristics.

Thinking (discussing) an event or body is the birth of an imagination about it, meaning we can view discussion as a process that generates imagination. From several fantasies, new fantasies arise, discussing them again.

The conclusion consists of this system of discussion, and the discussion turns into an illusion by drawing conclusions. Thus, if the discussion is a new line in the imaginary picture, the conclusion plays a certain role as a connecting link that reinforces the need by eliminating unnecessary lines. You can make the following analogy: discussion - actual performance, conclusion-skill, imagination-ability to think.

Practical human activity (its main part-qualification), mental activity (its main part-imagination) - this is primarily the work of the brain, more precisely, the higher nervous activity. So a discussion is a summary, a state of imagination, a moment of action. They form forms of thinking, and as the content develops, one replaces the other. When discussing an event, the conclusion is made, and the conclusion is embodied in the imagination.

When forming an imagination, it is important to make extensive use of the readers ' imagination about it. We will strengthen and accelerate them by shaping their subject matter, their understanding of an event, or a specific view of it, discussing it, asking questions, and helping them draw the right conclusions. These independent discussions and students ' conclusions are an important step in shaping the imagination. This stage cannot be bypassed.

The more the reader thinks and talks about imagination, the richer and fuller the content of imagination becomes in his mind. The most difficult thing for a teacher to do in forming an imagination in a student's mind is to anticipate and plan the direction and path of discussion and conclusion when going to describe this imagination. This is the next stage of forming the imagination.

In the process of studying various objects and phenomena of the material world, a person gets into their essence, forming an imagination, and does not start working with its description. He arrives at the description of the imagination through a long series of discussions and conclusions, abstracting many observations, generalizations, additions, and reflections.

In the process of learning also needs to bring their students to the basic concepts, structure definitions should be prepared with the help of cognitive actions (generalization, Discussion and conclusion ideas about the phenomenon and the subject), is built on one Plato, but from another handkerchief should be full of phenomena and objects and allowed to explore every payment, to enrich the imagination about him.

It is also worth saying that several definitions can be given that represent different torsos of the imagination. For example, a force can be described as an accelerating cause and as a deforming cause. Both definitions are correct, since both characterize the properties of force (dynamic and static implementation).

These are correct and incorrect definitions of certain ideas that the teacher can say without fear, and among such ideas there are contradictions on the basis of which the history of the development of science will be shown.

The study of the history of science allows readers to understand the relativity of our knowledge and the absoluteness of their efforts in a more complete and accurate disclosure of the essence (nature) of phenomena and objects. For example, if a teacher forms a representation of "Atul“ from one Toulon, starting with Atul "indivisible" League, leading it to the model of the nucleus and from it the laws of quantum mechanics, then from the second Toulon, he demonstrates to the students the power of human thought and its laws of progressive movement.

Another value of getting to know the history of science is that students realize that human practice is the true criterion of knowledge. They study the world and try their knowledge of it in their personal actions. Theorists study the atomic model not only to satisfy their interests, but also to solve issues of production, agriculture, medicine, i.e. many practical human actions. The correctness or inaccuracy of his (idea) is once again confirmed by these practical actions.

From them it follows that students are introduced to the birth of right and wrong thoughts and contradictions between them, studying the history of the development of science. This is of great importance in forming the imagination, teaching a critical view of false thoughts, and learning the laws of thought and human practice as a criterion for the authenticity of knowledge. Readers see through this (the history of science) the great significance of human practice and

are convinced that every imagination can be correctly described after the idea has been tested in practice.

Proven simple definitions are transformed into a broad definition, generalized in the process of subsequent formation of the imagination. It will reflect several main features of the phenomenon, rather than a single main character given in a simple definition.

We said above that the force can be estimated by acceleration or deformation. Here is a General definition of both the cause of acceleration and deformation.

The General definition not only characterizes the main characters of the imagination, but also solves the question of its inclusion in the system of imagination and establishes connections between fantasies. The General relations between these representations reflect the General relations between the phenomena of the material world and objects.

An important role is played by the logical generalization of the imagination in establishing the main connections of the imagination with other fantasies.

REFERENCES

1. Serdinsky V. G. Tour of physics in a rural school . M.: "Enlightenment". 1991.
2. Perishkin A.V. Razumovsky V. G. Fundamentals of physics teaching methods. Under the pretext of the manufacturer. Tashkent. "Teacher". 1990.
3. Malofeev R. I. Problematic teaching of physics in secondary school . M.: "Enlightenment". One thousand nine hundred and eighty
4. Sadriddin N. Rakhimov, A., Mamadaliev A. Z. Zhamalova the Basics of teaching physics. - T.: NMIU "Uzbekistan", 2006.B -192.