International Journal for Innovative Engineering and Management Research
A Peer Revieved Open Access International Journal
www.ijiemr.org

COPY RIGHT

ELSEVIER
SSRN

IJIEMR Transactions, online available on 19th March 2021. Link
https://ijiemr.org/downloads/Volume-10/ISSUE-3

DOI: 10.48047/IJIEMR/V10/I03/72

Title: **The importance of the use of innovative technologies in teaching physics**
Volume 10, Issue 03, Pages: 363-365.

Paper Authors
AXROR ESHTEMIROV,

USE THIS BARCODE TO ACCESS YOUR ONLINE PAPER

To Secure Your Paper As Per UGC Guidelines We Are Providing A Electronic Bar Code

International Journal for Innovative Engineering and Management Research
A Peer Revieved Open Access International Journal
www.ijiemr.org

The importance of the use of innovative technologies in teaching physics

AXROR ESHTEMIROV,
KARSHI STATE UNIVERSITY, 2nd year master
karena88@mail.ru

Abstract: The article analyzes the growing interest in increasing the effectiveness of teaching using interactive methods (innovative pedagogical and information technologies) in the educational process, the advantages of such lessons, the positive results. Emphasis is placed on the use of modern technology so that students can search for, independently study and analyze the knowledge they have acquired, and even draw their own conclusions.

Keywords: innovation, interactive method, physics, student, lesson

Introduction

Student example window. His demand for science is determined by how he can be a role model for the teacher. However, his passion for lessons and science should not be extinguished, so that the mirror does not ring and is always preserved. However, as a result of the advanced development of the time, the position of the propagandist-teacher must be a rich source of information, formed by a new ideological immunity, so that it is not filled with unnecessary external information, in other words, not be distracted from lessons. To do this, in addition to new knowledge, the teacher must have the ability to be creative, demanding, agile. Therefore, as the teacher enters each lesson, he or she is always asked, "How should the lesson be organized?", "Which didactic material should be used?", "Which methods should be used effectively in passing this topic?" 'ladi? " the question arises. In order to achieve the educational goals set in the lesson, the teacher's deep knowledge in the field of their specialization, intellectual potential alone is not enough.

The teacher must be able to fully assimilate his knowledge to students and develop in them the skills and competencies to apply the acquired knowledge in practice. Therefore, every science teacher, whether he is a school teacher or a higher education teacher, is serious about teaching methods based not only on his own experience, but also on the experience of others. need a headache. In this case, the teacher can be supported by pedagogical technologies and innovative ideas.

In particular, the well-known "Brainstorming" method is used to solve problems on a particular topic. This method allows students to think broadly and comprehensively about the problem, as well as to use their imagination and ideas in a positive way. encourages the development of certain skills and competencies. Also, using the 6x6 method to solve a specific task or problem by involving 36 students in a specific activity at the same time, as well as each of the groups. One of the most important methods is to help students in the cluster to think freely and openly about voluntary problems (topics) and to express their personal opinions. "The method of intellectual attack is to ensure the activity of students in the classroom, to free them from thinking in a standard way, to encourage free thinking. h, to gather a variety of ideas on a particular topic, to serve to teach a creative approach.

In fact, pedagogical technology-based activities allow young people to express their views on important life achievements and problems, giving them the opportunity to think and justify their views.

In fact, in order to solve the problems facing the education system in the process of innovation, it is necessary to cultivate individuals who are able to assimilate new information and evaluate their own knowledge, make the necessary decisions and think independently. Of course, the role and importance of modern teaching methods - interactive methods, innovative technologies - is invaluable. Innovation (English innovation) is defined as innovation, innovation, we consider the pedagogical process and the process of innovation, change in the activities of teachers and students, the

necessary process for its implementation.

After all, the only goal of this method is that the student will not be indifferent during the lesson. It comes down to independent thinking, creativity and research. Her interest in science is maintained throughout her studies. Their interest in science is strengthened by an independent and creative approach to each issue. The teacher constantly organizes his activities in cooperation with the student.

Well, the question naturally arises as to how interactive methods are used in the process. In fact, interactive methods are used in the implementation of innovative technologies that allow the content to interact. In other words, an interactive method of teaching is a special form of organizing cognitive and communicative activities in which learners have the opportunity to understand and think about what they know and think while being involved in the learning process. The role of the teacher in interactive lessons is partly focused on the students' activities to achieve the objectives of the lesson. In addition, during the “Sharing Time” phase, when a problem situation, issue, or question is asked that needs to be addressed first, it is a call to the basics of critical thinking. At this stage: - the urgency of the problem situation, issue or question is important.

Interest in learning (professional justification); as a result, the purpose of the study remains the student's personal goal. The student's active thinking activity is developed. Students then receive instructional information from the teacher and other sources as needed to solve the problem, issue, or question. This is the stage of information perception.

By the way, one of the ways to engage students in the process of teaching physics is through physical experiments during the lesson, in which students observe the physical processes in nature until the students themselves study physics. But as a result of these observations, not all students are able to draw the right conclusions about their essence, of course. Also, not all students have seen all the processes that take place. Therefore, it is important to specify the physical experiments that will be organized in the classroom within the school environment. Properly organized, demonstrated, and interpreted experiments in physics allow the student not only to learn the structure and operation of instruments, but also to observe the laws in them.

Physical education also stimulates students' interest in the subject. Demonstrations show physical concepts, physical quantities, and the ability to measure them. They are then formed, developed, and deepened in laboratory work and problem solving. At the beginning of a physics class, you need to demonstrate experiments that, while simple, are a starting point. What they see will serve as a basis for later explanation. The dimensions of the physical quantities (length, time, mass, pressure, temperature, etc.) are determined and the quantitative and qualitative relationships between them (the pressure of the liquid at the bottom of the vessel) are indica

In short, in accordance with the National Program of Personnel Training and the Law "On Education" in our country, the purpose of physics as a subject of general secondary education is general secondary education. based on the fundamental knowledge of physics. It also helps to develop students' scientific outlook and philosophical reasoning by explaining physical phenomena and the physical landscape of the universe on a scientific basis, reveals the dialectical connection between theory and practice, enhances the ability to perceive physical processes in nature and technology. preparation for their activities on the farm creates the basis for further education.

Literature

1. Ishmuhamedov RJ .. Ways to increase the effectiveness of education using innovative technologies. - T.2004.3-bet
2. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan "On approval of STS of general secondary education". Public education j.1999. Number 5.
3. DTS and higher general education program. educational development. Bulletin of the Ministry of Public

Education of the Republic of Uzbekistan. 4 special issue. -Tashkent: Sharq, 1999.

4. Saidakhmedov N. New pedagogical technologies. Tashkent, 1981
5. Tolipov O'.Q. "Applied bases of pedagogical technology". FAN Publishing House 2006.
6. Mavlonov H., Ulugov N., Boynazarov F., "Fundamentals of pedagogical technology". Publishing House of the Institute of Philosophy and Law. Tashkent-2007.
7. Yuldashev J.G '. "Fundamentals of pedagogical technology." 2007
8. www.solaris.ru
9. http: //www.ziyonet.o'z/o'zc/library/libid/10103 16.
10. http: // www.o'zbekistonovozi.o'z / pag