

The Role Of Pedagogical Technology In Teaching Students Using The Problem Situation Method

Kakhorov Siddiq Kakhorovich professor Bukhara State University.
Sharipova Dilnora Burkhonovna – Student of PhD Bukhara State University.
dilnora.sharipova91@mail.ru

Annotation: This article discusses the problematic approach of pedagogical technology in teaching physics in higher education, the introduction of an innovative approach in lectures, laboratory and practical classes, the brainstorming method in problematic lectures. The causes of the situation, as well as actions and solutions to overcome the problem are given in the table.

Key words: Pedagogical technologies, lectures, laboratory, practical training, problem situation, method of mental attack, electricity.

(Matthew 24:14; 28:19, 20) Jehovah's Witnesses would be pleased to answer with you. (Matthew 24:14; 28:19, 20) Therefore, the process of knowledge and financial supervision should also be characterly developed. Introduction of advanced pedagogical technologies in teaching is one of the tasks of the second phase of the National Literature Programme. It prohibits the educational process from developing the artistic abilities of young people, democratizing the relationship between teachers and educators in all schools, and introducing a new, or innovative, approach to the form, content and technology of education. Such a new approach requires first and foremost: a fundamental change in the relationship between a teacher and a student. It is no secret that today is dominated by a teacher, who holds himself primarily as a teacher, a transmitter of knowledge, information and an opinion on the behavior of young people, a counselor, a instructor. This can lead not to the development of creative, free thinking in teachers, but to passively absorb the reserves of ready-made knowledge and to obedient obedience. In the role of a teacher's knowledge transmitter, he should transition to a role that organizes the learning process, manages the motivations and activities of reading, and develops students' activities psychologically and pedagogically wisely.

The purpose of the use of pedagogical technologies is to compare students' life and scientific concepts, comparing different views of scientists, and stimulating interest in scientific knowledge and events, in connection with their future mutation.

The use of pedagogical technologies enables the teacher to work on himself, to regulate the information provided to students, and to prepare for the delivery of them to students, as well as to explain to students the physical aspects of the evidence of the development of science and technology and to develop students' ability to work independently.

Physics is known to be conducted in the form of three types of exercises. These are lectures, laboratories and practical training. Each training has its own place and sequence. If a topic is given theoretical basis in lecture lessons, it will be strengthened by experimenting with this topic in a laboratory exercise and solving an issue in a practical workshop. Nevertheless, the degree to which students master the subject varies. One of the ways to improve the level of learning is the use of pedagogical technologies.

Currently, teaching methodologies are enriched and filled with the use of pedagogical technologies [1-3]. The use of pedagogical technologies in teaching methodology, the need for the teacher to work on himself, to regulate the information provided to students, and to prepare to deliver them to students.

In the use of pedagogical technologies, first of all, it is determined to prepare a technological model of the subject, prepare a technological map, and use what organizers. First of all, it will be determined how to teach the lecture.

The unique aspect of the problematic lecture in teaching physics is based on the problematic situations that arose during the lecture. Problem education is the most viable type of pedagogical influence by a teacher, a process that is aimed at improving students' ability to think and fill the need for knowledge in the process of learning their knowledge, relying on the laws of thought. The

problematic lecture creates a problematic situation under the direction of the teacher, focuses on deepening students' knowledge by applying their knowledge and skills in new situations as a result of their active independent activities. Students will be tracked in the process of solving problems and will find solutions to problems. Teaches students to think creatively and logically, leads to the development and development of scientific, logical thinking skills in them.

The outcome of problematic learning depends on:

1. Problematic educational material on the subject;
2. Activate students' knowledge activities by creating problematic situations;
3. Create a set of problematic questions on solving the problem and explain it to students in a logical sequence;
4. In problematic lecture mode, the teacher creates problematic situations, solving problems based on their answers in cooperation with students to find answers to problematic questions in the lecture process;
5. The problematic statement style also works well in practical lessons. To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable giving, a brochure entitled Charitable Planning to Benefit Kingdom Service Worldwide has been prepared.

The problem situation is successfully used at all stages of the learning process in strengthening new theme bay, strengthening and strengthening knowledge. In problematic lectures, the teacher's activities include identifying academic problems based on the content of the preceding topic, creating a system of problematic situations, correctly organizing learning problems before students, and directing the lecture to solve this problem.

Problem situations should be structured in such a way that as a result, students' scientific knowledge and events will be carried out by comparing life and scientific concepts, comparing different views of scientists, and explaining the physical aspects of the development of science and technology in order to stimulate students' interest. Problem situations can also be conducted in laboratory solving, so the teacher divides the group into small groups and asks questions that create the problem, such as the study of semiconductor diode:

1) Why the conductivity of diode depends on temperature,

2) Similar questions will be asked about what charge carriers will be accounted for by p-n switching. In consultation with students on questions asked in the group, the heads of state summarize the opinions of the students. Students' activities will be aimed at understanding, analyzing, proving, investigating, and drawing conclusions about problematic situations.

Using a method of mental attack in a problematic lecture, students learn to use their knowledge in new situations and deepen their knowledge and acquire mental functioning methods. As a result, students organize their knowledge activities and create creative activities.

| Type of problematic situation | Reasons for the occurrence of the situation | Actions and solutions to get out of a problem |
|--|---|---|
| Lack of understanding of how electrical current in different environments is caused by the movement of charged particles | Lack of knowledge that electricity in different environments, i.e. solid particles, such as metals, vacuums, gases, liquids, is caused by the movement of various charged particles | To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable giving, a brochure entitled Charitable Planning to Benefit Kingdom Service Worldwide has been prepared. |

Below, I referred to the logical structure of a laboratory lesson conducted in the group on the theme "Obtaining voltamper characteristics of semiconductor diode." This laboratory exercise is chosen based on the modern pedagogical technologies (interactive) methods of education. The

intended topic will be discussed in the form of a debate with every student in the group speaking and expressing themselves. The teacher usually acts as an observer, and his task is to direct the debate in the right direction.

Based on the logical structure of the following laboratory exercise, 3 groups of 80 minutes and 3 groups independently launch an opinion attack for 15 minutes and express their views.

Group 1: Students responding to laboratory work in the nazarene section.

Group 2: Students who collect laboratory work devices, take the values of U and I in experience, and create charts.

Group 3: Students who draw the voltamper characteristics of the semiconductor diode based on the value in the table.

4: Expert chi.

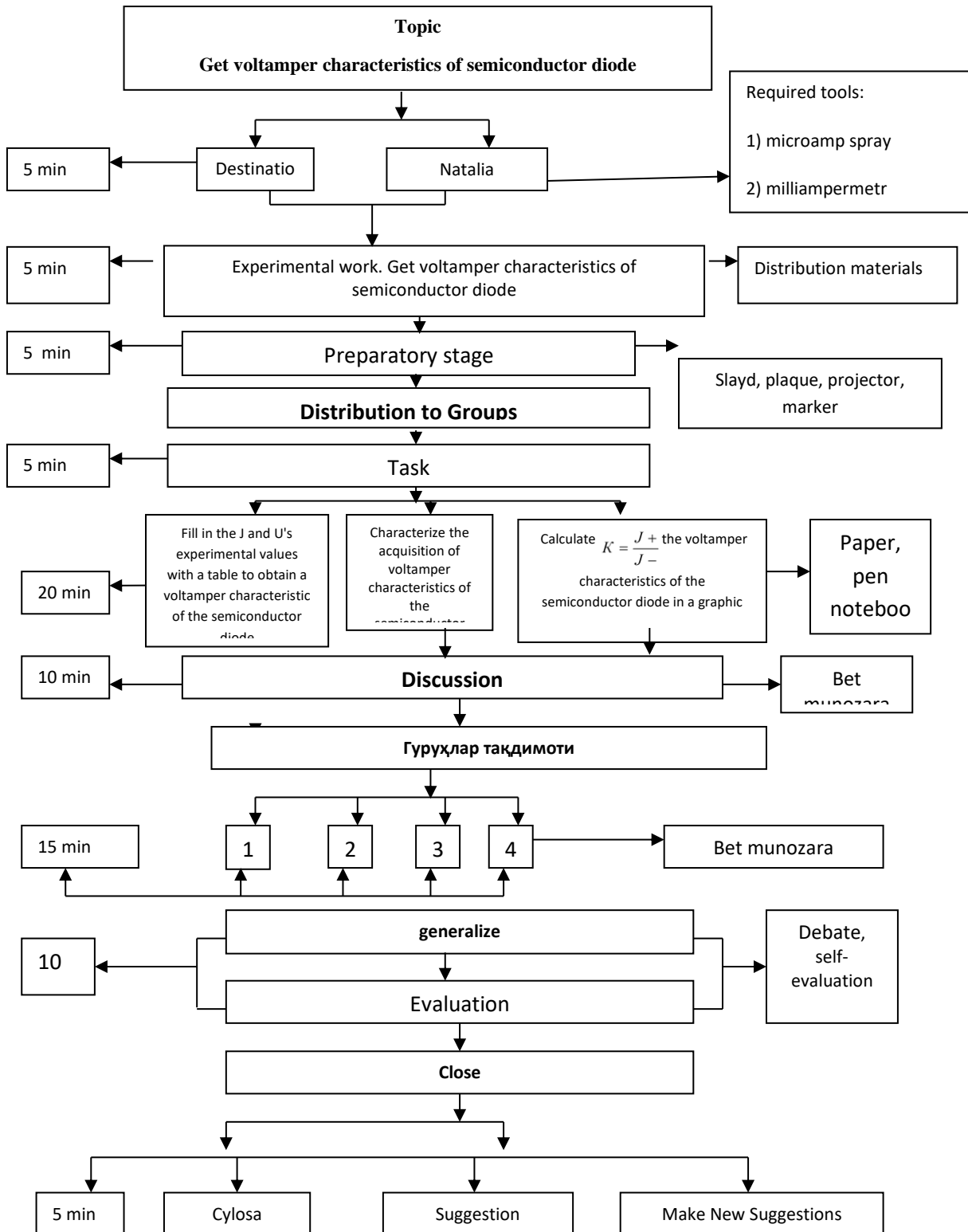
Using the interactive method of modern pedagogical technology to laboratory training, the faculty of physics held the direction of Physics as an open lesson in Phase 1 and Group 1, with the following results achieved.

The results of the observations are shown in the table:

| Experimen tal stages | Reques ts number | Level of adaptation in simple exercises | | | | | | The level of integration of modern pedagogical technology in an interactive way | | | | | |
|---------------------------|------------------------|--|----|--------|-----|-----|-----|--|-----|------------|-----|-----|---|
| | | Top | | Medium | | Low | | Top | | Mediu m | | Low | |
| Step 1 Group 1 | 23 | 2 | 8% | 12 | 52% | 9 | 40% | 8 | 34% | 15 | 66% | - | - |

Observations of the outcome of the lesson showed that teaching in this way was achieved for students to think independently, to analyze, to increase their activity, and to bring even conclusions themselves. All students were evaluated simultaneously in the lesson

Logical structure of group work



| № | LITERATURE | REFERENCES |
|----|---|--|
| 1 | Sakovich S.M. Innovative Technologies and Methods of Teaching in Professional Education: Article-M., 2010 | Sakovich S.M. Innovational technologies and methods of training in professional education: Statya-M., 2010 |
| 2 | Zhukov G.N. Osnovy obshchei professional'noy pedagogiki: Uchebnoe posobie [Fundamentals of general professional pedagogy: Textbook]. Moscow, 2005. | Zhukov G.N. Osnovy obshchey professionalalnoy pedagogiki: Uchebnoe posobie. –M. 2005. |
| 3 | B.Faberman "Advanced Pedagogical Technologies" Tashkent, 2000 | B. Faberman "Advanced pedagogical technologies" Tashkent, 2000 |
| 4 | Savilev I.V. "General Physics Course", Volume I-II. Tashkent, Teacher, 1983 . | Savilev I.V. "General Physics Course," Volumes I-II. Tashkent, "Teacher", 1983. |
| 5 | Ismail M.I., Habibullaev P.K., Khaliulin M.G. Physics Course (Mechanics, Electrical, Electromagnetism). Tashkent, Uzbekistan, 2000. | Ismoilov M.I., Habibullaev P.K., Xaliulin M.G. physics course (Mechanics, electricity, electromagnetism). Tashkent, Uzbekistan, 2000. |
| 6 | Ahmedjanov O. Physics Course", Volume I-II. Tashkent, Teacher, 1985. | Ahmadjanov O. Physics course ", Volumes I-II. Tashkent," Teacher ", 1985. |
| 7 | Trofimova T. Course of Physics. Moscow. "Higher School", 1990. | Trofimova T. Physical course. Moscow. Vysshaya Shkola 1990. |
| 8 | Detlaf A.A., Yavorsky B.M. Physics course. Moscow. "Higher School", 1989 | Detlaf A.A., Yavorskiy B.M. Physical course. Moscow. Vysshaya Shkola, 1989 |
| 9 | Калашников С.Г Электр. Тошкент, "Ўқитувчи", 1979. | Kalashnikov S.G Electr. Tashkent, "Teacher", 1979. |
| 10 | Karimov Kh.Y. New Pedagogical Technologies Tashkent, 2002. | Karimov Kh.Ya. New pedagogical technologies Tashkent, 2002. |
| 11 | Iveronova V.I. Practice in Physics. Mechanics and molecular physics. Tashkent, Teacher, 1973 | Iveronova V.I. Practicum in physics. Mechanics and molecular physics. Tashkent., "Teacher", 1973 |
| 12 | Tajiev M. Alimov A.Ya. and b. taste of the pedagogical technology-teaching process "Thinking", Tashkent- 2010. | Tajiev M. Alimov A.Ya. and b. Pedagogical technology - application to the educational process "Tafakkur", Tashkent-2010. |
| 13 | Xidirova V. Theoretical and practical principles for the use of pedagogical technology in the teaching process. "Science and Technology", Tashkent-2009. | Xidirova V. Theoretical and practical bases of application of pedagogical technology in educational process. "Science and technology", Tashkent-2009. |
| 14 | J.G., Advanced Pedagogical Technologies.- Tashkent, "Teacher", 2004. | Yuldashev J.G, Usmonov S. Advanced pedagogical technologies.- Tashkent, "Teacher", 2004. |
| 15 | S. Boltaev, K. Qurbonov. The use of innovative teaching, pedagogical and information communication technologies in distance learning. The teacher manual is published in Durdona. Bukhara-2020. | S. Boltaev, K. Qurbonov. Use of innovative educational, pedagogical and information and communication technologies in distance learning. Teacher's guide Durdona Publishing House. Bukhara 2020. |

| | | |
|-----------|---|--|
| 16 | B.X.Islamov, A.M. Axmedov, B.Sarkisian, A.U. Intelligence, D.A. Khakimov. Guidelines for performing laboratory work in the Optics Department of the General Physics Course 2017. | B.X.Islamov, A.M. Axmedov, B.Qodirov, A.U. Qodirov, D.A. Xakimov. Methodical instructions on carrying out of laboratory works on the Optics department of the general physics course 2017. |
| 17 | B.X Islamov Z.F.Beknazarova U.R.Rustamov Methodological instructions for performing intermediate supervision and independent work in physics. Tashkent – 2017 | BH Islamov ZF Beknazarova UR Rustamov Methodical instructions on intermediate control and independent work in physics. Tashkent - 2017 |
| 18 | B.X.Islamov, A.M. Axmedov, B.Sarkisian, A.U. Intelligence, D.A. Khakimov. Methodological guidelines for witching new pedogical technologies in laboratory work from the Department of Electrical and Magnetism of the General Physics Course. Tashkent – 2015 | B.X.Islamov, A.M. Axmedov, B.Qodirov, A.U. Qodirov, D.A. Xakimov. Methodical instructions "On the introduction of new pedagogical technologies in the laboratory work of the Department of Electricity and Magnetism of the General Physics Course". Tashkent - 2015 |
| 19 | Karimov Z., Axmedjanov G., Toxtaeva N., Beknazarova U. Metodicheskiy ukazaniy predecessor physics laboratory rabbi after razdelam "Electroichestvo i magnetism" T.2013 g.TIIM 126-b. | Karimov Z., Akhmedjanov G., Tukhtaeva N., Beknazarova U. Metodicheskiy ukazaniy predecessor physics laboratory rabbi after razlelam "Electroichestvo i magnetism" T.2013 g.TIIM 126-b. |
| 20 | Golish L.V., Fayzorova D., Fixing and Planning Pedagogical Technologies, Educational and Methodological Manual, Tashkent, 2011 | Golish L.V., Fayzullaeva D., Design of pedagogical technologies and Planning, Textbook, Tashkent, 2011. |