METHODOLOGY OF TEACHING PHYSICS

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Abstract: This article presents information about the importance of teaching physics, as well as practical application of students' theoretical knowledge and methods of teaching physics.

Keywords: interactive textbooks and programs, laboratory equipment, interactive activities, demonstration.

Physics is interesting. Physics helps us to understand how the world around us works, from can openers, light bulbs and cell phones to muscles, lungs and brains; from paints, piccolos and pirouettes to cameras, cars and cathedrals; from earthquakes, tsunamis and hurricanes to quarks, DNA and black holes. Isaac Newton: The Father of Modern Physics Sir Isaac Newton, associated with Cambridge University as a physicist and mathematician, became famous after propounding three laws of motion that established a connection between objects and motion.

Physics is for you if you have an enquiring mind, passion for understanding how things work, enjoy playing with ideas, dwelling over abstractions and complex issues; enjoy working with your hands, building or pulling apart things, and experimenting.

Studying physics strengthens quantitative reasoning and problem solving skills that are valuable in areas beyond physics. Students who study physics or engineering physics are prepared to work on forefront ideas in science and technology, in academia, the government, or the private sector.

Teaching physics helps students learn scientific and practical skills, develop theoretical and practical knowledge, solve problems and understand the laws of world physics. By teaching physics, students learn theoretical and practical knowledge about natural charge, energy, motion, force, phases, transitions and other bodies. This helps them analyze ideological and practical issues, understand the laws of world physics, and solve world problems. At the same time, the importance of teaching physics is to transform students' theoretical knowledge into practice, to develop their thinking through the conceptual and problem-solving necessary to study and solve their problems.

These methods are used to teach physics to students through practical exercises, laboratory work, textbooks, interactive lessons, experiments and other methods.

Ways to teach physics to students;

1. Provision of quality textbooks and software: Provision of quality textbooks, e-resources and software is essential for teaching physics. It helps students learn the content, make logical assumptions, and do practical exercises.

2. Setting up laboratory equipment: Physics teaching is conducted on the basis of practical training. It is very important for students to provide laboratory equipment and to carry out their mastered training in them, to demonstrate their theoretical knowledge in practice.

3. Organization of interactive textbooks: With the help of new technologies and interactive textbooks, teaching physics can be more interesting and understandable. Through virtual laboratories, interactive graphics and animations, students can review theoretical knowledge and study theoretical material logically.

4. Conduct practical exercises: In teaching physics, students understand concepts by doing practical exercises. They can apply their theoretical knowledge in practice, master it and confirm the results.

5. Logical Rigor: Logical rigor is very important in teaching physics. Students need to strengthen their logical rigor to develop their logical powers and see them comfortably in practice.

Physics will be of great importance in teaching students scientific and practical knowledge.

The following conveys to him the importance of teaching physics:

1. On the basis of practical knowledge: Physics constitutes the average basic skills in practical knowledge. During the learning process, students are shown the processes of how to draw each other, and practice periods help to understand the processes.

2. To teach theoretical knowledge: Enables students to learn and understand theoretical knowledge. Studying the fundamental stages of physics, such as physics, power, mechanics, thermodynamics, electromagnetism, atomic physics, and quantum mechanics, enhances students' prior knowledge.

The following are some of the main methods of teaching physics:

1. Demonstration: An advanced method of teaching the teacher's explanations. Models, articles, or multimedia tools such as video can be used for this method. It helps to reduce the time that students have to review and study the explanation by passing on serious indicators.

2. Laboratory work: A practical method that is important for students to learn their physics in a practical way. In laboratory work, students can consolidate theoretical knowledge, conduct experiments, collect data and analyze results. This method serves to ensure that students use their creativity and theoretical knowledge in practice.

3. Complex problems and examples: Methodology for engaging students with problems and improving their analytical and problem-solving skills. Using this

method, students are more interested in working with skills and problems to master themselves and achieve learning goals.

4. Verbal Teaching Methods: Verbal teaching methods are used to enhance students' learning and show them how it should be. This method helps the students to manage their knowledge and show them theoretical knowledge and help them to master in learning or problem solving.

5. Interactive Activities and Games: Interactive activities and games are used to increase students' interest and enhance their practical experience. This method helps in ensuring that students learn through play.

This combination of methodologies and the use of additional indicators and tools help students to teach important information of physical science and ensure an effective learning process.

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