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METHODOLOGICAL REQUIREMENTS FOR IMPROVING TEACHING OF THE DEPARTMENT OF ELECTROMAGNETISM IN HIGHER EDUCATION INSTITUTIONS

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ABSTRACT: In the article, the main process and phenomena of the electromagnetism department in physics are described in a systematic and structured way.

KEYWORDS: electricity, magnetism, field, charge, electric current, polarization, gas flash, electron emission, magnetics.

INTRODUCTION

It is necessary for students, together with professors and lecturers, to acquire knowledge, skills, and at the same time qualifications, which can be a necessary basis for their effective use in the process of their social, personal, and professional activities. The goal of education in today's advanced times is the ability to use certain information, the acquired knowledge of actions in the life process, and to master the forms of behavior in a sequence.

In the process of education, learning scientific knowledge from the electromagnetism section of physics, putting the acquired knowledge into practice, being interested in learning the principles of development, feeling the importance of electric and magnetic fields in our daily life, and the importance of generators in generating electric current. wakes up. As a result, they strive to master the skills of handling physical tools that are widely used in production and technology. For students to get deep and integrated knowledge of Physics - it is considered to be a two-way process in relation to each other, and it can organically embody the ability of the pedagogue to teach and the activity process of young students.

Also, students should be informed about their personal views on the development of their psychological characteristics, interest in studying, work, comrades, self, taking into account their chosen methods, abilities, and young people's views in thoroughly mastering the electromagnetism section of Physics. It also requires an understanding of the attitude towards others, self-demandingness, initiative, desire for research, goal, independence, will and emotional qualities, the level of determination activity and the views of mental improvement.

One of the most important issues in the educational process of teaching physics course is to increase students' interest in news in the course of the lesson, to turn passive listeners into active participants. This helps to control the quality of education. Science teachers can analyze, compare, encourage, motivate, focus on learning, develop young people in the process of self-generalization, and they are related to each other. they should be able to focus their attention on identifying their problems [1].

Published: January 30, 2023 | Pages: 143-145

It is necessary to understand the psychology of students in the classroom and outside the classroom, where physics is taught, not only to freely communicate and discuss with them, but also to treat them with respect and love for their personality. The content of physics education and the teaching method are interrelated, and the process of improvement cannot be studied separately. The improvement and renewal of physics education, in turn, requires the improvement of the teaching methodology, as a result of which high efficiency is achieved. One of the ways to increase the effectiveness of teaching physics in our higher educational institutions with modern methods is to carry out teaching with the program materials related to the science in an integral way with the knowledge related to the future professional activities of the students. Including, in the teaching of physics in technical higher educational institutions, if we explain more about the application of the physical laws to the processes and phenomena themselves, but their application in agriculture, the students will strive for new innovations [2].

In mastering the electromagnetism section of physics, more experiments, conventional types of elements related to electrical circuits, can use graphs related to science between physical connections, in which the experience in students develops the process of conducting tests . The following should be paid attention to when preparing a modern type of educational lesson. Extracting the content of educational materials. Choosing a teaching method. Determination of control methods [3].

To interest students in physics, to encourage them to study the working structure of technical devices created on the basis of the laws of science, to know the location of each detail, to stimulate their work through activation methods, and also by teaching. instead of traditional lectures in lim, it is advisable to use slides and video lessons during the lesson from advanced modern lecture classes

During modern lecture classes, young students are accustomed to effectively use internet networks and libraries to compare their acquired knowledge, understand that they are behind their peers, and constantly search for knowledge. As a result, the student's level of knowledge increases and achieves high efficiency.

Educational literature, technical tools, educational and methodical manuals, demonstration materials, modern ICT, textbooks as a form of education in the teaching of physics and its parts in technical higher education institutions. , all the tools that a student needs to learn are important [8].

The innovative model of today's educational technology is the most optimal method, form, tool of today's education that can determine the main goal and guarantee the achievement of the predicted educational results in the given period and in the existing situation. and is a general set of technology. Today's educational technology innovation model includes the following elements:

In the traditional form of teaching, the main focus of the teacher is on the student's acquisition of new knowledge on the subject, in which the pedagogue uses different methods, and the teacher himself is more involved in the lecture process. explains the topic to the student. Traditional goals of education:

The conditions for organizing modern training are as follows:

Published: January 30, 2023 | Pages: 143-145

It is necessary to treat every student as a great person, to respect him, to understand him as much as possible, and not to put pressure on him;

Realization of the student's interest, acquired knowledge, interest, ability to create new innovations;

To treat all students as equals, that is, to motivate students to become innovators in their profession, to motivate their interests in a general way, to focus on their relationships in acquiring new sciences, o to express high confidence in the knowledge, thinking, and capabilities of the student;

To be able to determine in advance the results of being able to turn the acquired knowledge and skills of the students in the field of physics into a good side while using educational technology in the course of teaching young people;

Taking into account the student's individual characteristics and abilities;

To develop the knowledge of students according to the plan and to be able to adapt it based on their personal capabilities;

To continuously help the student to increase his level of knowledge, to understand and develop, and to be able to convince the student himself;

To determine the prospects of development that each of the students should have and to determine that they are dissatisfied with their future profession, to be able to objectively monitor them and to be able to make a diagnosis, in a timely manner and in the right order. nagging

The solution to the problem is that it is the demand of today to create and introduce the educational process based on the general principles of pedagogical technology based on the ability to design the projects of each lesson on physics in technical higher education institutions.

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