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Physics and Everyday Life - Upgrade the Course Module(s) to Motivate the Students.

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ABSTRACT

The question "How can I increase students' interest in physics?" As part of the article, we have prepared a variety of new interdisciplinary projects to demonstrate how physics inventions are used in everyday life. We are living in the era of science and technology, and we also introduced the uses of physics in our daily lives and society. When the peoples of society and students had no idea about science (Physics) although they live and governed by the physics in our daily lives. If we are taking a small example like, when we are running on the earth, it is governed by the physics. There are many examples of use of physics in our daily lives and society.

In this framework of the research article, we have prepared the detail report based on discussion of one group of students. We use the physics applications in our daily life and different -different activities such as walking, playing, listing; cooking etc. physics has given to vast knowledge of technology and innovation.

KEYWORDS: Physics, Basic Science, motivation and upgrading the module(s)

Introduction

This article develops a new strategy on the educational program of preschools, secondary schools, and educational institutions based on the new educational strategy, emphasizing the exploitation of acquired knowledge and methods of education. Education. Real life. Life. It is important

that the program promotes the pedagogical autonomy of the seminaries as well as the professional responsibility of the religious in the face of the challenges of the educational process. The program offers a wide range of optional subjects needed to develop student's individual interests and potential. The program offers a wide range of optional subjects needed.

In the field of education, people and nature cover a wide range of topics related to the study of nature. Its aqueduct allows students to learn tools and styles to deepen their understanding of natural wonders and laws of nature. It also provides them with the facilities they need to better understand and use modern technology and help them better navigate their daily lives. The purpose of this article is to help high school students learn to ask "how?" questions. "Why?" and find ways to answer them, explain the observable natural physical phenomena.

Preceptors of Science has focused considerable energy on developing the high-quality school facilities that Preceptors of Wisdom will complement them. Problematic divestment, complicated processes and maturity of leaders are not conducive to taking advantage of the new equipment's benefits. To misinterpret the introduced miracles leads to developing negative stations for wisdom. The quest of exploratory conditions can be formed. How can we change the course to promote understanding and provoke physics researchers.

Focus On Research

Although some physics subjects have been found to be less demanding, there are some that are of interest to students. Molecular physics, waves, molecules, and atoms have low priority. Topics of interest are optics, astrophysics, sound, and energy. Students are interested in the problem of how cell phones work, why steel ships can float, and questions about space. Although some physics subjects have been found to be less demanding, there are some that are of interest to students. Molecular physics, waves, molecules, and atoms have low priority. Topics such as optics, astrophysics, sound, and energy are at the forefront of interest. Students are interested in questions about the problem, how mobile phones work, why steel ships float, and space. At the beginning of lesson, the teacher presents a problem, so it is very important that the unexpected conclusions are motivating. On the other hand, the most motivating one is the experiment a student uses in her physics class with her computer and the Internet. Also, note that the physics lesson has almost the same structure. The main part of most lessons is the teacher's presentation. About 70% of the lessons contain repetitions, and about 50% of the lessons in the first part of the lesson follow task solving. More often (about 50%), teacher demonstrations and about a third of lessons include student experiments. Videos and Internet are rarely used.

The aim of this study was to develop new modules for teaching and learning physics, focusing on everyday life problems, modern technology and knowledge, and students' own activities. At the beginning of a lesson, the teacher presents a problem, so it is very important that the unexpected conclusions are motivating.

Below is a list of these modules.

(1) Based on Practical Experiments.

(2) Nanotechnology.

(3) Electronics.

(4) Physical experiments using data loggers.

(5) Physics and criminology (Forensics Science)

(6) Physics at home

The school class had the opportunity to study theory and conduct some experiments in the laboratory of the Department of Experimental Physics. In addition, the department's teachers were ready to go to school and presented modules right in the classroom. Among all these modules, the author mainly presented "Physics at Home", "Physics and Forensics" and her field experiments. The next part of the task briefly describes the first two modules.

Physics at Home

The module consists of two parts. First, it is information about kitchen utensils. How refrigerators, microwaves, and induction cookers work. Some historical facts are also mentioned. In this part students collect some factual data or information about some electric device which is used in our home kitchen. Students can be analysis the data based on different- different technological tools. Other part of this modules is based on the experiments: We found the most interesting experiments in our home kitchen as Breads in the microwave, boiling of water in the microwave. What has proven in these experiments by the students? We found in these experiments, the useful possibility to analyse and measure the speed of light at microwaves and show some properties of standing waves.

Figure1. Physics at Home

Physics and criminology (Forensics Science)

Forensic science encompasses many areas of study, such as forensics, engineering, pathology, and biology. The most plausible application of physics is when biomechanical analysis is used to explain damage mechanisms, such as how damage occurs. The most important is the application of free-fall mechanics because of the mechanical interaction of "human-environment" systems. Another topic of great interest to students is the study of finger mirrors. Various experiments can be performed on this subject. Students can use dactylographic examples to investigate crime scenes.

Students study fingerprint patterns (arcs, rings, spirals, and connections). Students learn about the factors that affect the quality of a potential print, including fat and moisture content, temperature, humidity, and solar radiation.

Figure 2. Fingerprints with fingerprints suitcase

Forensic entomology is one of the forensic investigation subjects in schools. Forensic entomologists estimate the period after death based on the age of the present insect. This entomology-based estimate is often referred to as "time since colonization". Forensic entomologists may use several different techniques, including species succession, larval weight, larval length, and a more technical method known as the cumulative degree-hour technique. can be very accurate if the required data is available. Insects recovered from decomposing human remains can be a valuable tool for toxicity analysis.This subject demonstrates interdisciplinary connections such as Physics, Biology, Chemistry and Geography.

Research Methodology

The results of this study are based on PER (Research in Physics Education), known as an area of research that focuses on understanding how students think about physics and how to teach physics more effectively. Over the past few decades, RPE researchers have made great strides in understanding how students learn physics most effectively and developing teaching methods that apply this understanding to enhance their ability to learn. student learning. The search for an answer to the

research question "Why are the modules mentioned above?" was chosen most often. This issue can be investigated using different research methods.

The interview method was chosen to obtain study data. Interviews are one method of data collection. A key feature of this method is that the researcher asks questions of one person or a group of participants. Because of the large number of students, the authors use a semi-structured interview format. The questions relate to topics of interest to the subject, difficulty in understanding the problem (don't know the terminology), interdisciplinary relationships, relationships in everyday life, and gender. Interviews were recorded using handwritten notes. Students are representative of the class participating in the presented module.

Results of Research

In this research all the new modules, the most interesting and exciting for students are the practical experiments (see Figure 3). This course has been repeatedly held at the author's faculty and school. The author is invited not only to junior, but also to senior classes. The most important feature of this module is self-activation, all the experiences students gain on their own. Two other modules that students find interesting, and motivating are Kitchen Physics and Physics and Forensics. The most important aspect is your attitude towards routine and curiosity. According to teachers, the nanotechnology module is the most interesting. This module provides a lot of information you won't find in the documentation. Other interesting modules are Physics and Forensics. The electronic module is only used in one high school.

Figure 3. Based on Practical Experiments

Conclusion

The main results of the study can be summarized as follows. Students value the relationship between physics and everyday life when the relevance and usefulness of physics in their lives and careers has been demonstrated. They will not learn new subjects, but they will see how the knowledge of physics can be used in the real world. In all teaching phases, it is important to show the application of physics in daily life, how the staff works.

Life skills are the most interesting and important. Therefore, hands-on experiments are so popular. What Education Change Can Do? Curriculum, teachers, and structure need to be changed. The amount of new material presented in physics lessons is far beyond what an average student can learn and understand. There is not enough time in the classroom for application, experimentation, and discussion. Education should be interesting. This is because the modules provided by teachers in the Department of Experimental Physics are more interesting to students than when their own teachers teach the subject. It is important for students to understand that they are not interested in other subjects. Because it doesn't matter at your actual age.According to this study and PER, the best way to teach physics is through "interactive engagement" methods, hands-on activities applied to everyday life, and opportunities to talk with students and teachers. another member.

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