

# Ensuring Interdependence And Continuity In Physics Education Problems And Solutions

Arzimbetova Bibisara Atamuratovna

Republic of Karakalpakstan Senior teacher of the regional center of KHTKHQTUMOI

E-mail: [bibisara1951@inbox.uz](mailto:bibisara1951@inbox.uz)

**Abstract:** *The article provides recommendations on how to ensure interdisciplinary continuity and continuity in the teaching of physics. These recommendations are aimed at improving the skills and competencies of physics teachers*

**Keywords:** interdisciplinary connection, Methodical recommendations to the teacher, Mathematics, chemistry, biology, astronomy, geography, natural sciences

## I. INTRODUCTION

The system of continuing education provides social protection of the individual by providing fundamental knowledge through training of specialists on the basis of general education, general education, vocational and scientific in the conditions of the changing wills of the economy, as well as by providing a wide range of opportunities to meet the various educational exteriorities of Man and society, to raise the dignity and Continuing education creates the necessary conditions for the formation of creative, socially active, spiritually rich persons and the training of highly qualified competitive personnel at a rapid pace. Physics is inextricably linked with the disciplines of Applied and natural orientation, since it is a science that studies simple, at the same time Complex General Laws of nature. Accordingly, some subjects are also taught in chemistry, biology, geography and other sciences, are studied repeatedly. The implementation of interdisciplinary communication in the implementation of quality education is one of the main principles, its implementation is considered one of the main problems. In solving this problem, we consider it permissible to solve the following tasks:

## II. MATERIAL AND METHODS

1. To provide students with cognitive skills about the holistic landscape of the universe, signifying the existence of an inalienable link between the knowledge they learn in physics and the knowledge they acquire in other sciences.

2. When and in what order did the organization of classes in physics with the implementation of science-related activities, and in what ways is it desirable?

3. Creation of the basis of scientific and methodological provision of the transition of classes in the connection of science what gives the interdisciplinary communication to the student in carrying out this? -It will be the basis for the formation of the scientific worldview, will teach the correct and complete understanding of nature; - will increase interest in acquiring knowledge; - will prepare students for useful Labor, life, will teach logical thinking; -form the foundations of a holistic conception of the natural and scientific landscape of the Universe;- introduces the application of the laws of physics in practical activities for the purpose of scientific and technical development: - facilitates the study of physical knowledge, interests. Science communication can be carried out in the following ways:

1 interrelation of knowledge, taking into account the fact that exactly the same object is studied under the auspices of different sciences.

2. The use of concepts, methods of teaching, knowledge in other sciences in the acquisition of knowledge.

3. In the course of the lesson, knowledge in other subjects can be used in order to increase interest, concentrate attention, and facilitate imagination.

In physics, interdisciplinary relativity can be realized in a variety of forms.-to show the connection of physical phenomena with biological, chemical and other phenomena; - to give information about the application of physical phenomena in other sciences;- to use the knowledge and skills learned by students in other disciplines in the training of physics; - to organize extractions on the basis of the linkage of science ; -Organization of extracurricular activities of a common character, Organization of Circle work, Organization of evenings and conferences; -conducting observations and experiments and.

In what subjects can the science of physics be attributed? Mathematics, chemistry, biology, astronomy, geography, natural sciences help to study physical knowledge in depth from a scientific point of view. Such subjects as literature, history, music, fine arts serve as a means of increasing interest in the teaching of knowledge, facilitating imagination.

## III. RESULTS

The following subjects in the teaching of physics and geography science, atmospheric pressure, heat engines and their performance, and the study of other subjects indicate the link between these two disciplines. On the basis of knowledge of the structure of the Earth, its dimensions, movement, atmosphere, atmospheric pressure, measurement of the formation of winds,

energy sources and the use of energy, there are laws of physics, these knowledge are also studied in the course of geography. In physics and chemistry, the structure of matter, atoms and molecules, the structure of the nucleus, in teaching subjects, nuclear reactions, the amount of matter, crystal lattice, electrolysis phenomenon and other subjects are studied in their direction. Elements periodic system is used in the Departments of molecular physics, electricity, atomic and nuclear physics. Although in the teaching of physics and biology it is known from the Botanical course that in the composition of each fruit there is acid. From these acids it is possible to make a galvanic element, using it as an electrolyte. On the topics of mechanical motion, reactive motion, the movement of such animals as calms and eight legs can be explained by physical motion on the basis of biological knowledge.

The history of the study of physical phenomena in the teaching of physics and historical science, the work of scientists who worked in the field of physics, historical events in the field of physics, the history of inventions connect these two disciplines. For example:, the legend about Archimedes, Ar-Razi, Ahmad Fergani, Beruni, Ibn Sina and other Central Asian scientists are studied in various fields of physics. 1. in explaining its relevance to the science of physics and literature. United Ozar, not united Tor. In those bodies where several forces are acting, the effect of individual forces may not be noticeable to the body, but when forces are added, the effect increases. This requires that the forces are in the same direction. 2. The tree has an axis, a shadow. Phenomena of light, the formation of a shadow is associated with a linear dispersion of the beam of light. 3. A mirror to a friend friend. It is used for the formation of an image in a flat mirror and the subjects in the circle of the properties of the image.

What is the role of the teacher in teaching these topics? The teacher first gets acquainted with the work plans and the material to be studied in other disciplines and makes work plans. -Science establishes a constant communication with teachers, interacting with the problems and solving them; the teacher shows the connection of knowledge acquired in other sciences in the provision of knowledge to the students, helps the student in the analysis of the acquired knowledge from different sides, directs the students to work independently with the literature; Sciencelarar uses visions, images, concepts and terms, practical work materials, daily observation results and unconditional computer techniques for the purpose of showing relevance and teaching physical knowledge; at the end of each quarter, it would be appropriate for science to organize aesthetic lessons that represent the connection. In order to fulfill these stated requirements, it is necessary to provide the teacher with methodological recommendations and developments, instructions for assistance.

#### **IV. CONCLUSION**

The same term is used if the placement of samples, recommendations from advanced work experience for scientific and methodological assistance in the implementation of science-related activities in the educational portals on the Internet is organized. In textbooks, the effectiveness of training is further enhanced if logical issues are given, which are solved through the use of science-based communication in the selection of questions and assignments.

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