



The Essence of the Methodology of Interdisciplinary Formation of the Scientific Worldview in Primary School Students

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Abstract: *In this article, the process of improving integrated education in elementary grades, the methodical system aimed at determining the talents, abilities and interests of students, integrative properties, the knowledge, skills and qualifications acquired by students in the sciences of science and mathematics. Issues are stated.*

Keywords: *mathematics, extracurricular activities, problems, funny problems, multiple-solution problems, scientific outlook.*

One of the main tasks of school education is to form students to look at the world as a whole, interconnected unit, to see and understand its global problems and solutions to these problems. In the content of education, man and his relationship to the world: man and nature, man and society, man and man, man and technology, nature-man-technology-environment problem are increasingly occupying a central place. The educational content of concrete and natural sciences should reflect the coherence and integration of knowledge related to various academic subjects that study the problems surrounding the relationship between man and nature. This leads to qualitatively new changes in the knowledge of science in the educational process. This knowledge is manifested as a unique synthesis, a set of knowledge related to concrete and natural sciences and humanistic directions.

In the interdisciplinary teaching of science and mathematics in elementary grades, the development of students' thinking ensures the high quality of knowledge, specific aspects of psychological comfort are inculcated in the lessons, and the curriculum is based on the integration of disciplines. educational activities aimed at effective organization of students' activities are provided for improvement.

In the improvement of integrated education in elementary grades, the development of students' scientific world view by interdisciplinarity of science and mathematics is important from the point of view of the present time, and it becomes more relevant based on new social requirements. Today, the demands arising from the development of science and huge changes in production are setting new tasks for school education.

Implementation of interdisciplinarity in the educational process has a strong impact on the quality of education, allows for the modernization of education, and the expansion of innovative teaching opportunities. A teacher who is able to organize a lesson with interdisciplinarity ensured, not only increases students' interest in their subject, but also helps them master this subject.

Depending on the content of the lesson, the method of passing it, and the correct organization, the interest and abilities of the student in this lesson will increase. Interdisciplinarity is of great importance in the education of qualities such as striving for novelty, determination and courage in defending one's point of view, independence and critical view, making the student interested in knowledge and learning.

In fact, the future teacher's professional pedagogical activity based on an integrative approach is carried out on the basis of "teacher-student" interaction, and it is in this process that educational,



educational and developmental goals are realized.

Informatization of society on a global scale, rapid changes in technologies, specific psychological characteristics of modern professionals, determine a number of requirements for education and training of the young generation. A graduate of a modern school should not only acquire the culture related to new techniques and technology, but also be able to develop it, be a person with perfect potential, initiative and creative thinking. Priorities in education have shifted from the formation of currently known knowledge, skills and competencies to the development of students' intellectual and creative abilities.

It is necessary to solve the tasks of developing creative abilities by organizing educational and creative activities within each subject. The need for the formation of the student's creative ability in the school requires the development of modern technologies for creative educational activities, the development of forms, methods and tools of this process, the creation of appropriate didactic and educational-methodical support, a set of educational and creative tasks. requires relevance. In the concept of international education established until 2030, "Creating an opportunity to receive quality education throughout life" is defined as an urgent task.

In this regard, the President of the Republic of Uzbekistan dated July 9, 2019 "State support for the further development of mathematics education and sciences, as well as measures to fundamentally improve the activities of the Institute of Mathematics named after V. I. Romanovsky of the Academy of Sciences of the Republic of Uzbekistan Decision No. PQ-4387, Decision No. PQ-4708 of the President of the Republic of Uzbekistan dated May 7, 2020 "On measures to increase the quality of education and development of scientific research in the field of mathematics" and other related to this field this training manual serves to a certain extent in the implementation of the tasks defined in the regulatory legal documents.

It is emphasized that the teacher is the main person in the school, depending on the level of his pedagogic skills, and pedagogic skills, as you know, is an educational system carried out to the level of art. In this regard, the level of pedagogical skills means the teacher's constant work on himself and his achievements in self-education, constantly in search, perfecting his pedagogical skills and, of course, the depth of students' knowledge, skills, and abilities. quality, their education is understood. All this indicates that the educational process is materially and technically provided and the level of improvement of workplaces has increased.

Since the basis of the educational material is the textbook and planning, the teacher changes and supplements it knowing the conditions of teaching. The method means achieving the goal. One of the important aspects of teaching is the mutual coherence of the activity of the student and the teacher.

Each subject in elementary school is an integrated course, in terms of content, they are inextricably linked with natural sciences, which ensures the acquisition of knowledge about the environment that is understandable for elementary school students. Pupils of this age have not only an emotional attraction to studying nature, but also related to the motives of learning. Taking into account this characteristic of students, it is necessary to fill their needs for learning with new content to support their interest. It helps students to discover the interrelationships in life and to understand that man cannot live without diversity in nature.

Educational integration is a high level of interdisciplinary communication, a tool that allows creating a whole integrated knowledge. The definitions given to the concept of integration are different. The general aspect of this education is integration, which consists in achieving a holistic view of the existence around us.



Thus, any method requires its application to achieve the intended goal. These tools can consist of objective or intellectual knowledge about the object of activity, necessarily achieving the set goal. All of these are desirable for any method, but not sufficient for a teaching method. Method structure includes teaching methods. But the method is not a set of these methods. The method is a separate process of the teacher's or student's mental or practical work, which completes the form of mastering the material recommended in this method. For example, the teacher gives a way to remember. The method is separated from the method, it loses its importance in acquiring knowledge and forming skills and competencies.

The reason for the growth of the effect of studying in enriching the creative activity of the student is the same as the activity of their direction. In the school, the officially logical connection between concepts, opinions and conclusions (arriving at a certain point of view) is added to the connection that manifests itself in the process of natural-scientific research and is learned through dialectical logic. These new cognitions and logical knowledge do not formally develop separately from logical knowledge, but together with them.

In order for the student to master the dialectical method of thinking, the requirements of formal-logical or dialectical logic of this or that educational material, the role of the scientific theory of knowledge in the study of the necessary information, the strengthening of the main component, the student's reading, o Strengthening internal logic in learning activities helps to understand the objective connection of science with life, theoretical and practical knowledge with moving forces.

Only under these conditions, it is possible to direct the study of all the specific features of mathematics by the student to a systematic and specific goal (these are a clear, realistic representation of the mathematical concept and its properties, and the organic similarity of mathematics and logic). Thus, comparing the result of control, its necessity, that is, in the creative education of the student's need for logical proofs, helps him to understand the necessity of the deductive structure of mathematics.

The reforms carried out in the field of education in our country require the complete informatization of the educational system, revision of the content of education, integration of academic subjects, and the effective use of innovative pedagogical technologies in education. This, in turn, requires the formation of a single informational educational environment in an educational institution, the creation of an information base and its effective use.

In this guide, we aimed to study mathematics in interaction with natural sciences in order to teach primary school students the term of mathematical concepts independently. In particular, as evidence of our high thoughts about the concept, an example is given through the integration of primary education subjects.

Any concept has a name, content and size. The set of all important properties of the object constitutes the content of the concept. For example, an example of the content of the concept of trees is a perennial plant with a woody body and branches, which emits oxygen from itself and cleans the air.

Therefore, the volume of the concept is also a set of objects that can be named by one concept. The content of the concept determines its size and vice versa. If the scope of a concept is included in the scope of a second concept, the second concept is said to be general with respect to the first concept, and the first concept is said to be specific with respect to the second. For example, the separation of trees into species from the above example is relatively general in concept: ornamental and fruit trees. As a feature of the concept, pears, cherries, apples, and walnuts can be an example of the division of fruit trees into species depending on their shape.



Today's demand is to study the sciences in connection with each other. The only goal of educational reforms is not to tire the student and to increase his interest. After all, a student may not understand mathematics, but as a result of such a situation as natural science and other subjects being his favorite subject, we consider it your achievement that you can find a way to the heart of your student.

Summary. Effectiveness of integrated knowledge in the interdisciplinary formation of the scientific worldview in elementary grades based on the psychological characteristics of students, didactic principles (scientific, coherent, coherent, comprehensible, unity of theory and practice) and the teacher's pedagogical skills. is mounted.

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