



Educational Process D A Integration Of Sciences Improvement

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Abstract. In this article, the improvement of the integration of subjects in the educational process, the application of content knowledge, the importance of mastering knowledge, the improvement of student knowledge in interdisciplinary teaching, the creation of problem situations, as well as the introduction of nature - society into the curricula and programs of general education schools. issues of harmonizing relations between , studying serious relations to the environment in the context of interdisciplinary integration , development of students' thinking, their worldview, behavior, general culture, environmental protection, interdisciplinary integration content, forms, teaching methods, ways, opportunities and tools, previously acquired knowledge, The state of conscious mastering of educational material by applying knowledge, skills and competencies in new situations is described using innovative educational technologies.

Key words: integration , thinking, knowledge, improvement, school, students, content, form, method, tool .

Therefore, integrated education envisages a new approach to the content of knowledge given in schools from the basics of science, and its main goal is to study the educational material as a complex of problems with a logically complete content, to form a holistic scientific picture of the world and society in the minds of students, nature and in it It consists of gathering scientific understanding and knowledge about the role of a person.

Knowledge of the surrounding nature has an impact on the development and education of elementary school students. By studying this knowledge, students will be able to analyze the relationship between nature and man, the essence of their interrelationship and unity, their attitude to the environment,



the actions taken in the way of nature protection, and the causes of the origin of environmental problems. tries to determine the factors. This situation creates a foundation for the formation of interdisciplinary knowledge and concepts among students .

Such an opportunity is provided on the basis of an interdisciplinary approach. It can be considered both as a form of integration of academic subjects and as a method of synthesizing subjective new knowledge. An interdisciplinary approach to the integration of general education and natural sciences is considered the most optimal direction for elementary science and mother tongue sciences. It is based on the conceptual idea that the result of the integration of academic subjects is the assimilation of subjective new knowledge, which cannot be formed when the subjects are taught without interconnection.

responsibility of natural sciences is to form the scientific outlook of students . For this reason, the content of natural and mother tongue subjects in elementary school has great potential in forming a scientific worldview in students. In the educational process of the elementary school, first of all, introducing students to scientific concepts, ideas, theories, laws, and the importance of acquiring knowledge is intended to use the acquired knowledge of students in problem situations. The system of education and upbringing is created, which is inextricably linked with the formation of students' thinking and the formation of a person's conscious attitude to nature and society [7].

subjects in the context of interdisciplinary integration in primary grades is important in forming students' logical thinking. In the process of improving the technology of integrated education, it causes a new way of thinking in the mind of the students, to learn a certain subject perfectly and to increase their interest in subjects.

Students learn new facts, knowledge and concepts in their practical activities, and through this, new topics learned in lessons are summarized based on existing practical activities. As a result, they become knowledge, skills, skills and competences formed by students.

Integration and pedagogic activities are the combination of standards and creativity, science and art. That is why it is important to correctly combine the various methods of educational activities in integrated education. After all, success is a process dependent on the result of education [12].

interdisciplinary integration is used by the teacher, the quality of



educational work increases and it creates conditions for a deeper mastering of the subject being studied. The teacher should make these connections in his work according to the content of the lesson. Interdisciplinarity increases students' mental feelings towards nature and creativity.

The activity of the teacher is equal (adequate) to the educational activity and the activity of the student. The general structure of the activity: goals, incentives, means, results, control and taking into account the synthesis of various disciplines, mutual evaluation, mutual control is understood.

First of all, it is necessary to determine which lessons are suitable for integration. The basis of such lessons is the proximity and logical connection of the main topics of various subjects.

Taking into account these characteristics of students, it is necessary to fill their needs for learning with new content to support their interests. This gives students an opportunity to reveal the interrelationships in life and to understand that man cannot live without diversity in nature.

Interdisciplinary integration in education , as well as innovative educational technologies, that is, tools such as computerization and informatization of education, can be shown as important organizing tools. Integration is the main mechanism of humanization in the content of natural sciences [4].

also an important condition for the development of knowledge and interest in academic subjects. By analyzing the educational material by topic, it is superficially determined which topics of different educational subjects are related to each other, by means of structural analysis, the constituent concepts, arguments, laws, judgments, conclusions of the educational material, the connection between the imaginations is established.

Studying and researching the problem of integrating sciences revealed that the basis of the process of integrating science and scientific knowledge is the unity of the material world, that is, nature, society and the mutual coherence of its understanding. As a result of the development of coherence and interdependence between sciences, the importance of information media in this field, the achievements achieved in the educational process are also manifested in nature, society, technology and the material world. This interaction is considered a necessary factor for the internal natural development of each science .



interdisciplinary integration in the educational process is the methodological basis of the integrated approach to education, and in this process many times returning to different lessons and concepts, deepening and enriching them, taking into account age characteristics can be achieved by providing important knowledge that is understandable [5].

Thus, improving interdisciplinary integration among students, ensuring interdisciplinarity in the educational process, learning the content of lesson topics, and activating the following processes in mastering its important rules:

drawing students' attention to the main aspects of academic subjects, which are of primary importance in revealing the important ideas of science;

constantly complicating perception, expanding the scope of students' creative initiative and independence of learning activities, forming a scientific outlook in students effective implementation of interdisciplinary integration, using various types of didactic tools, interdisciplinary communication in the educational process step-by-step implementation of related organizational work;

achieve mastery of educational subjects in a mutually organic unity with the help of various didactic tools;

creating creative cooperation between teachers and students.

Currently, the process of interdisciplinary integration in modern schools is considered as a factor that helps to find solutions to pedagogical problems, improve school activities, increase the potential of the team of pedagogues, and find optimal ways to influence them [1].

Also, in the education system, the implementation of knowledge on the improvement of interdisciplinary integration among young students on the basis of information technologies is necessary to raise a physically and mentally healthy, mature generation capable of taking responsibility for the future of our country. A large-scale measure to create all the necessary conditions makes it possible to carry out activities.

Information culture is the purposeful use of all types of information technologies in the daily life and activities of students in the process of learning and learning. The teacher himself is the guide for the successful completion of this process.

The organizational-methodical component of improving the scientific worldview of students based on interdisciplinary integration in the teaching of



natural and native language literacy in primary grades is considered important.

In particular, when taking into account the level of formation of students' scientific worldview based on interdisciplinary integration, it is appropriate to pay special attention to their activities in the educational process and mastering the norms of interpersonal social communication. The development of students' scientific activity, their way of thinking, their activities in the educational process, their knowledge skills, **The logical structure of the individual development spheres** is implemented in practice based on their interrelationship, with the help of their acquired theoretical and practical knowledge.

As a description of the integration of education, it can be expressed by the improvement of learning activities of students. Knowledge acquired by the student in this process mobilizes the formation of new concepts based on the integration of sciences through its activity [2].

Improvement of integrated knowledge in primary education, not limited to introduction to the features of nature and society, but revealing the interactions between various objects of nature in a form that can be understood by young schoolchildren, creates an opportunity to increase love for nature. It is also possible to mention a methodological approach to teaching knowledge aimed at combining different fields of knowledge in order to improve the scientific worldview of students in primary school based on interdisciplinary integration. This approach includes several key components.

In particular, during the lesson, it is organized on the basis of the common curriculum for all students, the teacher organizes, manages and activates the cognitive activities of students in accordance with the content of the studied subject, educational, educational and developmental goals. carries out pedagogical activities aimed at Therefore, the activity of students in the lesson is considered their educational activity, and the teacher's activity is considered a pedagogical activity aimed at organizing, managing and activating this activity. Learning goals can be achieved only when the educational and cognitive activity of the students in the lesson is organized in harmony with the pedagogical activity of the teacher [3].

Each lesson serves to form a conscious attitude to the environment by acquiring the knowledge, skills and abilities of the students, expanding their scientific worldview, developing their mental development, educating them as



a person, and developing their ecological thinking. contributes to the performance of tasks .

The following requirements were set for the lesson in the teaching of the primary school educational process based on the integration of subjects:

- clearly defining the educational goals of each lesson and clearly defining its place in the system of lessons;
- optimal selection of educational material with environmental content in accordance with the level of preparation of students, educational goals, and requirements of the educational program;
- to determine the ways to develop ecological thinking based on the general and specific biological concepts developed in the lesson, the skills and competencies to be acquired;
- to activate the student's cognitive activity by identifying and harmonizing effective teaching methods, tools, methods of knowledge control and stimulation in order to realize the purpose of each stage of the lesson;
- taking into account the knowledge acquired by the students, the subject's ability to expand the scientific worldview, provide spiritual-ethical, mental, hygienic, physical, sexual, economic education, aesthetic sense, hard work, ecological culture, educational setting goals clearly;
- to satisfy the students' need for self-acquiring knowledge, to satisfy their need for studying natural sciences , to develop their interest, to encourage creative activity and initiative in their activities;
- development of the planned development of the lesson at the scientific-methodical level based on the thematic plan;
- creation of a set of distribution and didactic materials with environmental content, educational assignments, differential assignments for monitoring and evaluating students' knowledge;
- drawing up a technological map of the lesson to ensure efficient use of time.

The conditions for the logical construction of the plan of educational subjects in relation to each other are as follows:

- establishing the relationship between the objects considered in different educational subjects ;
- organization of connection between psychological-pedagogical and philosophical knowledge and methodical methods and styles of education [8].



In particular, social-humanitarian, natural-scientific, and technical knowledge methodologies are seen to be interconnected in the process of understanding science. It is on the basis of integration that natural sciences can be seen in solving the current problems of scientific and technical development in the instructions of the bioworld, in the study of human activity. Such differences are reflected in changing attitudes and general knowledge of all school requirements.

In order to solve these tasks, in order to scientifically substantiate the interdisciplinary integration in the educational process, the selection of the interdisciplinary content of each educational subject, using the latest innovative pedagogical technologies used in the educational process, each of the educational subjects it is necessary to form a system connected with

It is necessary to rely on the essence of the interrelationship of all educational subjects by instilling natural knowledge in elementary school students, especially to identify new aspects of teaching subjects in the social and humanitarian category. Interrelated knowledge and concepts are presented to students when interdisciplinary communication is provided in the learning process.

Also interdisciplinary Integration describes a qualitative shift in the cognitive process associated with quantitative integration . Interdisciplinary Many studies devoted to the definition, forms and ways of implementation of integration distinguish a qualitative new type of interaction, typical for the modern conditions of the development of science (Toshpulatova Durдона p. 37).

However, interdisciplinary communication of students in the process of teaching primary education subjects Based on the analysis of literature and studies, it became clear that the issues related to the development of logical thinking skills are among the problems that are still waiting for their solution.

The interrelationship of sciences complements each other. Accordingly, ensuring integration in the content of primary education has created a number of pedagogical opportunities. Integration of educational content is interdisciplinary integration The classification of concepts is in the scientific research work of most scientists reflected [9].

Also, the multifacetedness of the expression of integration as a description of the cognitive process makes it a research object of philosophy, as well as scientific theory , which is due to the large number of its ambiguous,



multifaceted definitions. will depend. In each definition, significant features of the process of interdisciplinary integration are distinguished, describing this field of knowledge. In the philosophical studies of this problem, methodological processes of integrating factors and concrete forms of scientific knowledge and interdisciplinary integration in various fields are carried out, and synthetic definitions of the concept of "integration" are given on this basis . It focuses on identifying forms of integration, functional features, bases, and mechanisms.

Improving the educational process in primary education based on the integration of subjects , studying the possibilities of logical and mental activity of students, developing the ability of logical observation in students, organization and content of the educational process based on an integrative approach related to In it, scientific research works on the characteristics of the development of students ' logical thinking skills improvement is necessary . Currently , scientific and research work on developing the ability to think logically in the context of integrated education of elementary school students is of particular importance [6].

It can be recognized that there are problems in improving the educational process in elementary grades based on the integration of subjects :

t modernization of educational content interdisciplinary integration that the process is not sufficiently studied.

He is in elementary school interdisciplinary integration the issue of developing the educational system Lack of thorough study in the implementation of the national curriculum and in determining the student's logical thinking levels ;

content, form, method and analysis of the level of formation of logical thinking skills in high school students based on an integrative approach that the tools are not fully developed;

It provides for special quality issues and the use of modern innovative technologies for the logical thinking of students in the educational process of primary education , as well as the improvement of a new generation of textbooks and training manuals. (Toshpulatova Durдона page 37) .

in education is the most interesting and effective compared to other pedagogical problems. Despite the sufficient development in the scientific literature and the teacher's work on integrated textbooks, the ideas of integration have not been widely applied to the general education process . Therefore, interdisciplinary integration is to reveal the content of the



educational process in detail requires [11].

The development of science integration technology in primary classes will help the young generation to form a comprehensive approach to the process of providing fundamental knowledge, a holistic vision and understanding of nature and society.

Integrated lessons teach students to naturally understand the unity of the worldview, the coherence of events. It should be taken into account that the integration links of school lessons should be scientifically considered. After all, in the educational process, interdisciplinary communication should be reflected in the introduction of content knowledge into the educational process, scientific and technical achievements, environmental protection, and the use of specific teaching forms and methods [10].

In elementary school, it is not limited to the improvement of integrated knowledge, familiarization with the features of nature and society, but revealing the interactions between various objects of animate and inanimate nature in a form that can be understood by schoolchildren of a young age. It provides an opportunity to fulfill the wishes of 'repair and careful use.

Ways to implement interdisciplinary communication are as follows:

the sequence and consistency of learning different subjects should be chosen in such a way that learning one of them helps to learn the other;

to ensure the same approach to the formation of common understanding, skills, skills and competencies;

ensuring unity of requirements for knowledge acquisition and acquisition of skills, qualifications and competences;

extensive use of knowledge, skills, skills and competences of other subjects in learning one subject.

It requires the use of computer and information technologies in the implementation of interdisciplinary integration in educational institutions. After all, pedagogical software tools that demonstrate, teach, model and control allow students to master and learn generalized methods of solving problems, to generalize knowledge .

Summary. Improvement of interdisciplinary integration in the educational process leads to the effective development of students' acquired knowledge, as well as an increase in their perceptive abilities, activities, interests, and mental intellectual capabilities. In the educational process, it is necessary to understand the educational programs and textbooks as a didactic



opportunity that ensures the balance of interdisciplinary integration. In particular , in interdisciplinary teaching, it serves to ensure the depth and thoroughness of integrative knowledge, based on didactic principles and the teacher's pedagogical skills, in order to improve students' knowledge of environmental content. Also, the use of selected materials in the context of interdisciplinary **integration in the educational process** improves students' attitudes towards science creates a basis for interest, and as a result, guarantees the development of students' thinking.

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