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IMPROVEMENT OF ECOLOGICAL CONCEPTS IN PRIMARY CLASS STUDENTS BASED ON INTEGRATION OF SCIENCES

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Abstract:
This article is written about the improvement of ecological concepts in elementary school students based on the integration of subjects. They combine different systems of knowledge, provide an opportunity to know the diversity of the phenomenon or process. Based on this knowledge, general concepts arise. The formation of interdisciplinary imaginations allows to use knowledge, to subordinate them to each other, to identify gaps in the boundaries of knowledge.

Keywords: Class, learner, environmental, science, integration, lesson, activity.

INTRODUCTION. It is possible to understand the interdependent development of various events that occur in nature and society, and the connections between them, only on the basis of the integration of sciences. Studying natural and social sciences separately leads to the formation of scattered knowledge about them. Such knowledge does not allow the creation of ideas about the unity of nature and society, the role of humanity in nature, the need for a systematic approach to the correct understanding of the nature of global problems facing humanity and its rational solution[1].

In primary grades *ecological* concepts in teaching natural sciences Concepts that form the basis of the students' scientific worldview when implemented in the context of science integration are divided into the following groups:

- unity of animate and inanimate nature, totality and coherence of happening events;
- the need to study the events in the material existence, the causes of environmental tragedies and measures to eliminate them;
- ways to learn the laws of nature and use them effectively and rationally;
- cause-effect relationships in the connection and development of natural phenomena;
- man is a social being;
- nature protection is the basis of life on our planet.

In particular, in primary grades environmental issues in teaching natural sciences are comprehensive, and how easy it is for this educational material to destroy the phenomena and changes that occur in nature, the organicity between them, and their interconnections allows to understand[2]. For example, an increase in the air temperature of our planet makes us realize that the resistance of living organisms to survive in their adapted habitats leads to death in the struggle for survival[22].

In primary grades *ecological* concepts in teaching natural sciences In the context of the integration of sciences, the following tasks must be performed:

- acquisition by students of knowledge about the integrity of nature, the interrelationship of society and nature, and acquisition of ecological knowledge, skills and abilities that are the basis for forming a conscious attitude towards nature;
- understanding the importance of nature and its components in a broad sense, understanding the difference between renewable and non-renewable resources;
- economical use of natural resources, protection of the environment, implementation of greening and increase of natural resources, formation of motives for active participation in socially useful work[3].

In the process of teaching natural sciences to students, the formation of theoretical skills and ecological thinking on issues is a dialectical knowledge that interprets the harmony of nature and society as a natural-historical, progressive, social problem.

concepts in elementary school students improvement based on the integration of disciplines ecological education is carried out on the ground of upbringing[23].

In particular, environmental education includes the following main sections:

- to educate students in the spirit of loving natural beauties, enjoying them aesthetically;
- to provide knowledge about the laws of development of animate and inanimate nature, complex interactions between nature and society , as well as the consequences of human economic activity on nature.

Consequently, the simplest form of connection that produces the simplest knowledge about nature or science is a local imagination, limited to a certain place or concept. This connection is detached from other

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knowledge, thus providing the simplest mental activity. This is typical of junior high school age. Concepts that belong to a system are the simplest system concepts[4].
They are formed based on the study of a topic, subject or event. Knowledge of a subject is achieved by comparing new evidence and concepts with existing knowledge. The simplest generalization of knowledge takes place, but it would be the same if the acquired knowledge is connected with the knowledge that is close to it.

ANALYSIS AND RESULTS. In this, students' analysis and generalization activities are created. Concepts within the system provide students with knowledge of the entire system of disciplines, and a wide use of knowledge is observed within the scope of the studied subject. Visualizations within the system reflect time, environment, and number connections. Interdisciplinary ideas are considered the highest level of mental activity.

of teaching on the basis of the integration of sciences has been considered by many pedagogues and scientists. In particular in his research, MNSkatkin divides temporary interdisciplinary connection into three types, between previously acquired knowledge and knowledge being studied, between learned knowledge and knowledge to be acquired in the future, and simultaneously acquired knowledge. to the connection between[5].

NM Verzilin and MUKonsunskaya showed that interdisciplinary communication can be of two types: horizontal and vertical. Scientists have noted that horizontal interdisciplinary connection between the subjects taught in one class, one quarter, and half a year, and vertical interdisciplinary connection is realized by using the knowledge acquired in previous classes[24].

ANZakhlebniy and MVReshkov emphasize the need to implement the integration of subjects in the content of separate subjects in the school, taking into account the links in the curriculum and textbooks. Thus, the desire to integrate educational materials is undoubtedly a natural and leading character both in the world and in our national pedagogy[6].

The function of the integration of subjects is the leader, it provides the learning and teaching of other subjects in accordance with the principles of didactics, and makes it possible to obtain productive results. Based on his many years of scientific research and observations, VMMonokhov expresses his opinion that the integration of sciences is necessary for students to know, understand and use biology effectively, and that it is important for the formation of skills and competences in students[7].

In "Primary education" magazines, the problem of integration of school education is given great importance. LNBakhareva in her article "Integration of primary school education on the basis of local studies" states that "Integration is the process of bringing together and connecting disciplines that are carried out together with the processes of differentiation, which helps to create new, holistic knowledge. , is a high view that implements interdisciplinary relations", he says[25].

According to MNBerulava, the integration of the educational content means the process of interaction of the structural elements of the educational content and its result, which is accompanied by an increase in the systematicity and density of the knowledge of learners.

NKChapayev selected directions of integration determine the composition and structure of the integrative process. The composition of the integrative process means a set of objects that interact and form a new integrated unit.

However, the study of this phenomenon in education is still far from being completed. For this reason, A.Ya.Danilyuk notes that the concept of integration is introduced into the context of pedagogy, but insufficiently meaningful pedagogical filling does not give the opportunity to speak about it as a sufficiently grounded scientific-pedagogical concept.

According to VALazareva, the most promising form of educational content organization is the introduction of integrated lessons and courses that implement interdisciplinary communication, which are considered to be an increasingly widely accepted type of integration in educational practice[8].

According to AVUsova, the influence of interdisciplinary communication on the education of students is realized by improving and revising the internal logical structure of teaching methods and methods.

In MTGafurov's research work, he proposes the issue of strengthening ecological knowledge by integrating the teaching process of related subjects on the basis of ecological goals and directing them to a mutually coherent goal[26].

International experience shows that integrated subjects, which are the basis for the development of knowledge about nature and society, are included in the curricula of many countries. It informs that the integrated sciences with a focus on natural sciences are the main means of forming students' environmental responsibility in the world community[9].

In studying the process of integration, Ya. A.

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Komensky emphasizes that "everything related to each other should be studied in the same way."

Later, many pedagogues approached the idea of interdisciplinarity and contributed to its development and generalization. According to the idea of D. Locke, "In the formation of educational content, one subject should be filled with elements and facts of other subjects."

In his article on didactics, IVPestalotsi, while discussing the issue of correlation in textbooks, says: "Remember the subjects related to each other, realize that they are in a state of organic connection in nature." Pestalozzi emphasizes the danger of one science moving away from another.

and ideas informed by any science should be given to the world and life in a broad and illuminating way".

i nsky had a great influence on the development of the theory of interdisciplinarity. XVStoyunin, NFBunakov, VIVodovozov and other pedagogues also worked effectively in the development of this methodology. The importance of interdisciplinarity in teaching and education in schools has been considered by many pedagogues-scientists[10].

A number of scientific works are devoted to the problem of inter-subject and intra-subject connections in elementary schools , and are focused on the issues of gradually creating and implementing the integration of teaching materials.

I. Boguslovsky's article "From baby to world, from world to baby" is of great importance in studying the integration process. It says: Children's perception of the environment, learning to it, and the artificial division of this environment into different subjects in school education cause various contradictions.

Such views were recognized by scientists as early as the middle of the 19th century. In a number of Western European countries (especially in Germany), generalized programs have begun to be created. The authors of this program try to condense the studied phenomena around a certain core. Most of the time , this core consists of studying the environment, and it also includes the labor process and culture[11].

the end of the 19th century and the beginning of the 20th century, the idea of integration was valued as a progressive idea. The well-known educational reformer J. Dewey put forward the new principles of improving educational programs, placing the child as the sun, calling it the center of pedagogy.

is the thesis "From the baby to the world, from the world to the baby".

Later, focused subjects appeared that expand the mind of the child. As the child grows up, his worldview expands, concepts such as family, school, district, city, country, human universe begin to appear in his mind, and the level of knowledge also increases.

XIX At the beginning of the century , several interesting works in the field of pedagogy were carried out in the way of integrating knowledge. Progress has been made in this direction, especially in the field of primary education.

In this period, it is envisaged to apply the course "Patriotic Studies" intended for students to master and observe the materials of environmental life. A wide program is planned that includes concepts such as nature, animal world, and man. School , street , village , city , region were taken as unifying core[12].

But the problem of integration reached its high pedagogical level in the 1920s. The council of scientists divided the subjects mainly into three blocks. These blocks were of great importance in directing the content of knowledge.

In such a case, the lessons would become integrated, lose their characteristics or remain in the middle. But it participates in mastering the concepts of a generalized subject with its content and aspects: a city, a factory, a factory.

was not the same for all disciplines. Until 1927, history, geography and literature were added to the social sciences. But at the beginning of the 1930s, an end was put to such innovation and pedagogical research. The school system reverted to the traditional system of individual subject education. Of course, there were occasional calls for a return to earlier courses and interdisciplinary connections[13].

In an integrative source, all subjects are solved as a product of developing creativity, technological integration is the basis of the transition to the direction of computerization of the general education process, active teaching methods for all teachers in the course of the lesson, and synthetic description (world artistic culture). It is assumed that there will be classes and artificially constructed meta-subjects (sign, number, symbol).

In fact, today a new approach to unification of school subjects begins. In interdisciplinarity, he addresses the problem of bringing together and integrating various subjects that are close to each other.

In particular, the biologist-methodist scientists of our country have carried out certain works on the research of interdisciplinary connections between natural sciences. ATG'ofurov researched the problems of interdisciplinarity in the teaching of biology, SSFayzullayev, interdisciplinarity in the teaching of genetics and selection, and JOTolipova, the use of science integration in the training of pedagogical

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personnel[14].

One of the important problems of education, the issues of integration and classification of knowledge were developed in the research works of RHJorayev. In particular, according to the scientist, integration is the establishment of structural links between different knowledge systems, their generalization, and the formation of students' holistic ideas about nature and society.

In the textbook "Environmental Education in Biology Lessons" created by MGNishonboyeva, focusing on interdisciplinarity in biology lessons, that is, the use of ecological concepts and laws in the process of teaching biology, the formation of ecological concepts in students, natural sciences leads to conscious and deep assimilation of acquired knowledge. It contains a comprehensive system of scientific knowledge about nature and society, their interdependence, natural laws. The expediency of using ecological issues in the organization of lessons based on the interrelationship of natural sciences was emphasized[15].

Also, the formation of ecological thinking of young students, their worldview, behavior, general culture, in particular, ecological concepts, is an important pedagogical problem[21]. Many scientists have scientific research works in this field, GOKomilova has conducted scientific research works on environmental education for preschool children. PUBerdanova carried out scientific and research work on the pedagogical foundations of the formation of environmental culture among children of Karakalpak families.

So, what is the essence of integration in education?
the achievement of schoolchildren's perception of the world around us as a whole (in which integration comes into play as an educational goal); secondly, bringing together general aspects of science knowledge (in which integration is considered as an educational tool)[20].

Today, the problem of integration of subjects is recognized as one of the directions aimed at the pedagogical team, actively searching for effective solutions to new pedagogical tasks of influencing students.

consider the opinions of Olima RAMavlonova on the problems of integration in the educational process. He divided integrative education into classes as follows. In particular, the integration of many disciplines can also be called universal or general, replacing several basic system courses. For example, combining reading, nature, painting lessons into one common lesson[16].

Usually, such courses authors combine the materials of the natural sciences and bring them into a certain system and make their courses integrative or They call it the brain. It can be seen that the correct sequence of teaching natural science materials in the primary education system depends only on the structure of the lessons. can only be achieved by saving. Some prominent scholars argue that this is being solved by the continuous study of natural sciences in traditional schools. A number of scholars believe that the traditions of integrated teaching are also widespread in primary education classrooms[19].

Thus, the desire to integrate educational materials is one of the main problems in the world and in our public education system. Currently, special attention is being paid to the problem of integration. Recently, by integration in schools, we understand the ability to use new active pedagogical research, creative growth in the pedagogical team, useful for students, and convenient methods of instilling in the minds of students[17].

Today, dictionaries do not show the methodological meaning of the word integration. But the well-known Latin word "Integratio" means recovery, filling, and "integrir" - a single whole - has been accepted for use in two senses.

1. Some parts combine elements into one.
2. economic or cultural integration when two or more countries have the same social structure.

The presence of one type of part or elements and the possibility of their natural subordination to one goal and the proximity in the method of a number of educational subjects gives the basis for defining the term integration, that is, teaching, educating and training students in certain academic subjects. the science of methods of assimilation.

Currently, it is considered as a factor that solves the integration and pedagogical problems in the modern school, improves school activities, increases the potential of the team of pedagogues, and finds optimal ways of influencing them.

Integration as a pedagogical situation has two traditions: first of all, it should be said that some school subjects have an integrative character. Often this is the level of integration within the subject: for example, literacy classes (teaching to read and write) - was already an integration lesson at that time. Also, the literature lesson at school was implemented on the basis of a single goal. We believe that the teaching of such interconnected literature is aimed at unifying the skills of creative thinking and creativity[18].

These include elementary science courses that provide general concepts, stimulate children's interest in learning natural sciences, and tell about nature in an

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interesting way, for example, "Natural Science" in elementary grades.

CONCLUSION. Following environmental education in elementary grades, it is seen that environmental topics are included in mother tongue and reading literacy, natural sciences , technology, and mathematics. In the course of our literature study and research work, we were convinced that primary school teachers, and later school graduates, having studied some subjects, felt difficulty in applying "elementary" knowledge in life. they do. They lack the independent thinking skills to apply what they have learned in practice. One of the reasons for this situation is the fact that different subjects are not interrelated in primary education.

In this case, the principle that integration is not a change of activity or a transfer of knowledge from one subject to another, but a creation of new didactic equivalents based on the integration of modern scientific knowledge is rejected

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