

Improving The Methodology Of Developing Integrative-Creative Competences Of Students

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Abstract. This article is about the classification of educational problems, finding and analyzing their various solutions, and its complexity, which is considered an important characteristic of the educational problem, is a necessary parameter in finding ways to solve the problem. Classification of educational issues according to the level of complexity allows, on the one hand, to choose issues based on the set goals and real mental capabilities of learners, on the other hand, such an approach greatly helps students master the educational material.

Key words: space, development of science, directions of science: classification of problems, solving problems, complex problems, qualitative problems.

Enter. The integration of theoretical and practical problems of education in the teaching of all subjects is very important in the conditions of new social demands. Today, the development of science and huge changes in production are demanding new tasks for school education.

The modern education system is aimed at teaching the basics of science at a high level, educating young people with advanced thinking, a holistic understanding and imagination of the world, and the ability to correctly perceive the events around them.

The current list of a large number of subjects in the higher education system leads to the formation of a fragmented worldview of the graduates of the institution. Modern science is more inclined to the integration of exact and natural sciences.

The main part. Integration refers to interdisciplinary communication. The core of interdisciplinary harmony was born from the need to fully show and explain nature in textbooks. The integration of the educational process and its importance are shown in the works of great pedagogues as follows:

The great didactic Jan Amos Comenius said: "Everything related to each other should be studied in a similar way". According to D. Locke: "In determining the content of education, one subject must be supplemented by the elements and facts of other subjects."

K.D. Speaking about the integrated didactic influence of past pedagogy on psychological-pedagogical relations, Ushinsky states: "Any knowledge and ideas presented by science should be expressed as a broad outlook on the world and life and enlightenment." the theory of interdisciplinarity. Kh.V. Stoyunin, N.F. Bunakov, V.I. Vodovozov and other teachers worked effectively on the development of the methodology.

The importance of interdisciplinary mixing or integration has been considered by many educators. In particular, I.D. According to Zverev, interdisciplinary communication develops the students' ability to think and increases their independence. Along with increasing their interest in science, it also forms labor skills and qualifications and greatly helps to educate ecological culture. At the beginning of the 20th century, some interesting pedagogical research on integration was carried out and some progress was made, including in the field of science and natural science education. Currently, special attention is paid to integration.

When we talk about integration in higher education institutions, we mean new pedagogical research, creative growth in the teaching team. In integrated teaching, special attention should be paid to:

- each lesson should be purposeful;
- attraction to subjects should be connected through the selected material on the topic;
- to determine ways to increase student activity and activity;
- the course should focus not only on teaching, but also on the implementation of humanitarian aspects;
- based on the theme of the subject, it is necessary to pay attention to the formation of society, human consciousness and development, confidence in the future of our republic, and scientific knowledge;
- In general, courses should be compatible with each other.

XIX. - In the 20th century, extensive pedagogical studies were conducted to create an integrated course for introducing the primary classes to the natural environment. In particular, these cases A.Y. Gerd, D.N. Kaygorodov, A.P. Pavlov, V.N. Maksimova, S.P. Baranova, M.N. In connection with the names of scientists such as Skatkin, they recommended including an integrated course on nature and environment in primary education [39; 166].

A number of works are devoted to the relationship between subjects in primary education. These problems are in the last development zone of the transition to the integration of entities. This is the process of acquiring the content of education and knowledge, skills and competences and their application has not been studied theoretically and practically. there is much debate among scholars.

In the process of integration, interdependence is raised and regulated, as well as the elements of this system are regulated. How can these general rules be applied in school education? Modern didactic methodology emphasizes that the success of teaching and educating students depends on the formation of their understanding of the unity of the world, the need to conduct their activities on the basis of natural general laws, and at the same time on the formation of the ability to solve interdisciplinary relations in science.

Integration in education can be seen through a systematic approach to the content of the subject in the program. Several levels of integration can be distinguished:

- elementary - combining elementary knowledge about nature;
- unification of secondary - science departments;
- final - to consolidate the last stage of studying biology. Knowledge of any subject is achieved by recognizing new facts and concepts and comparing them with the same knowledge. The simplest generalization of knowledge always occurs, but it is best when the acquired knowledge is combined with the knowledge that is close to it.

This leads to the formation of students' analytical and generalization skills. In-system perception ensures students' understanding of the entire system of subjects, wide use of knowledge within the studied subjects. Perception within the system reflects the relationships between time, environment, and numbers. Interdisciplinary perception is the highest level of mental activity. They combine different systems of knowledge, which allows us to understand the diversity of the phenomenon or process. Based on this knowledge, general concepts emerge.

The formation of interdisciplinary perceptions allows the use of knowledge, submission to it and identification of its shortcomings. At the same time, Yu.M. Kolyagin and O.L. Aleksenko reflects his negative attitude towards interdisciplinary integration, saying that "A limited number of academic disciplines cannot reflect the large amount of knowledge about the real world and the interdependence of elements" [40:136]. Psychological researchers E.N. Kabanova and Miller say that "an important indicator of intellectual development is the process of transferring skills and abilities based on a goal that is new to the teacher."

But today, a new approach to the integration of higher education disciplines has begun, and the problem of integrating interrelated disciplines is currently being solved. How to describe educational integration? The concept of "Integration" implemented in the educational process has two meanings:

- achieve student understanding. the environment and the whole world around us (in this case, integration as an educational goal);
- convergence of common aspects of scientific knowledge (in this case, integration is considered as a teaching tool). Currently, the issue of integration of education is considered as one of the directions that helps to effectively solve the tasks of teachers and students.

At the same time, the problem of harmonizing education and upbringing is theoretically and practically important and relevant. Currently, the issue of harmonizing education in natural sciences is of great importance, which helps to combine other types of knowledge. This approach is well known and widely used in the practice of foreign schools. The problem is to combine several related subjects not only at the primary, but also at the middle and higher levels of school education.

This integral science should include a number of socio-economic and moral-aesthetic ideas and concepts necessary to understand the unity of nature and society. Foreign experience shows that integrated subjects that help to get to know nature and society are included in the school curricula of many countries. These integrated subjects, which focus on the environment, indicate that students are developing environmental responsibility.

Integration is the joining of independent parts. There are two ways to do this: Adding a new element to an existing structure and creating a completely new system from different elements.

In the science of pedagogy, the term "integration" is used in the following meanings: 1) as a uniting into a whole, a unity of any parts or elements (O.S. Grebenyuk, A.Ya. Danilyuk, B.M. Kedrov, N.S. Svetlovskaya, Y.S. Tyunnikov, A.D. Ursul, G.F. Fedorets, M.G. Chepikov and others); 2) as a state of interdependence between individual components of the system and the process that determines such a state (O.M. Sichvitsa and others); 3) as a process and result of creating a single, integral whole (L.N. Bakhareva, I.D. Zverev, V.N. Maksimova, etc.). THE WORLD. From the point of view of a systemic approach, Ursul identifies such forms of integration as a set (set), complexity, ordering.

Summary. The concept of complexity is applied to the problem of integration, which can be considered as the initial form of synthesis. As an order, this form of integration provides an additional unifying feature for those included in a set of unifying elements. The growth of connections leads to a new qualitative form of integration when there is an organized majority that forms a whole unit called a system.

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