

INTEGRATION OF THE SCIENCES AS A FACTOR OF CREATING A CREATIVE ENVIRONMENT IN THE EDUCATIONAL PROCESS

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Abstract. *Rapid developments in today's educational market create a need for the improvement of integration in the organization of education. Therefore, this article considers the integration of subjects as a factor of creating a creative environment in the educational process. It also provides feedback on its importance in public education and higher education.*

Keywords: *integration, integration of sciences, educational sciences, natural-scientific outlook, integration of knowledge, direction (profile) of specialist training.*

In the present conditions, in which the foundations of the Third Renaissance period are being laid in our republic, one of the most important tasks in the way of the implementation of the priority tasks set for the implementation of comprehensive reforms to raise the educational system to a new level in terms of quality, in accordance with international standards, combining national and foreign experience, is continuous education system is the implementation of modern technologies of efficient organization of effective use of opportunities for interdisciplinary integration in the process of education. As noted by the famous Uzbek literary critic Ozod Sharafiddinov: "Because everything, large and small, in the infinite universe is created in interdependence and one ensures the existence of the other, in the educational process, which is an organized pedagogical form of knowing the world it is this unity, close connection that should be taken into account. Interdisciplinary communication is also important in literary education, which is aimed at the formation of personality qualities in students based on the understanding of other people's psyche. In order to achieve effectiveness in teaching literature, it is necessary to pay special attention to ensuring its connection with other academic subjects taught at school».

At a time when information globalization, science and technology are developed, and waste-free technologies are being implemented in the production sectors, the society needs people who have comprehensive knowledge, skills, qualifications and competences, who have mastered modern techniques and technologies, and are able to solve problems. feels the need. The analysis of the best practices of educational institutions in developed countries of the world proves that it is possible to achieve certain efficiency in this topical subject by implementing integration in the teaching of subjects.

It is known that increasing the number of academic subjects does not always bring positive results. Because today's modern technology requires not only chasing numbers, but also qualitative changes. In this regard, the experience of developed countries can be used. Because they have already introduced integration into their education system and introduced integrative subjects. Great Britain, Korea, Switzerland, Hungary, USA, Russia and other similar countries are among them. Today, the process of integration has entered the education system of our country.

Integration means "whole", so it is the integration of different parts and elements of the process of thinking growth into a single whole. This shows interdisciplinarity in education, teaching subjects in close connection with each other.

The integration of subjects is one of the urgent problems in didactics, especially in the teaching of subjects, and the implementation of the integration of subjects in the teaching of a certain subject in general secondary schools is considered.

Integration of sciences is a complex and multifaceted process. If we look at this concept philosophically, it is related to the problems of the development of science and scientific knowledge, that is, the knowledge, skills, skills, support and science that students have learned from concrete, social and humanitarian sciences. It means that private competences are not only usual and familiar, but also arise as a result of their use in a new and unexpected situation. It is also understood as the process of students acquiring vitagen (life) experiences as a result of practical application of acquired theoretical knowledge.

In today's age of innovation, the integration of sciences is taking place at a rapid pace. On this basis, the integration of academic subjects is also reflected in modern educational concepts. The interrelationship between academic subjects is one of the main factors in expanding the natural-scientific worldview by students by imagining the general picture of the scientific world.

The complexity of technology and mechanisms in production enterprises in the republic, as well as the introduction of new technologies to agriculture, farming and animal husbandry, require the young generation to deepen their understanding of the fundamentals of science, expand their scientific outlook, and engage in active intellectual activity. is doing.

Improving the educational process by harmonizing the educational content, teaching methods, tools and forms, bringing up the personality of the pupil and student in an all-round way, expanding the natural-scientific worldview, interdisciplinary connection in teaching specifies the implementation.

By combining the content of education, we understand the process and result of formation of holistic knowledge, methods and types of activity, as well as value orientations of a person. In addition, in this process, one of the necessary conditions of the process is to pay attention to the direction of preparation of specialists who are being trained for society and its development.

Depending on the direction (profile) of training specialists, we can distinguish three levels of integration processes in the construction of educational content: interdisciplinary, monodisciplinary and mixed. An example of interdisciplinary integration is the training of specialists with dual competence related to the desire to cover a complex, ambiguous activity that includes various elements with intralogical connections, but represents a systemically formalized whole.

Interdisciplinary integration of various specialties allows expanding the field of activity of a specialist and, in our opinion, is the most promising direction of formation of educational content in higher education. This can be done in two ways:

1. According to the principle that teaching depends on one generalized object of activity;
2. By looking for mechanisms of organic integration, for example, humanities and natural sciences, humanities and general scientific knowledge.

Training of specialists with dual competence constitutes a pedagogical system with all characteristic elements and features. In this case, integration is carried out at intra-cycle, inter-cycle and extra-subject levels. Also, it will be possible to create new integrated directions of training of specialists relevant for the developing labor market.

Each academic discipline included in the field of integrated knowledge is not only an independent section of the new one, but is organically woven into the subsequent material.

In order to create the scientific basis for the formation of integrated content, it is of fundamental importance to determine the core of integration - which of the profiles perform the function of integration and why what types of connections appear in this connection between

certain disciplines. It seems that such a core is a profile that sets the ultimate goal. The subjects of the second competence are united around it and work as a cognitive tool to achieve the goal. The profile, which plays the role of an integrator, determines the search for elements of theoretical and normative knowledge collected in relevant disciplines necessary for the realization of the goal. Thus, it can be said that the process of interaction between profiles in the training of specialists with dual qualifications is carried out not at the frontal level, but at the local level.

When profiles interact, their terminological and categorical apparatus includes new concepts that were previously characteristic of one or another discipline. On this basis, the languages of previously separate sciences interact and their scientific terminology is regulated. Adapted concepts form a unique basis that consolidates certain disciplines into a whole.

The most powerful unifying effect occurs when a science that adapts certain concepts begins to actively use them for its own purposes. For example, pedagogy began to use concepts of cybernetics such as "management process", "management system", "information processing", "feedback", «algorithm».

In addition to concepts and categories, the exchange of interacting disciplines can use methods, principles, conceptual ideas and other elements of theoretical knowledge for their purposes. In this regard, it is not forbidden to use them in different ways. For example, related sciences such as physiology and labor economics widely use the concepts of "tension" and "intensity" in the study of work and interpret them in different ways. In the process of integrating knowledge, using the tools of different disciplines, it is possible to overcome the differences in definitions by reviewing the conceptual range and identifying the necessary characteristics of the studied phenomenon, both individually and in general, descriptive intersecting categories.

As a conclusion to the above points, it can be said that the set formed in the process of interdisciplinary integration is characterized by increased orderliness, increased interconnections, the level of unity of parts and the emergence of new system effects. The development of the integration process takes place not in the direction of increasing the quantitative composition of content elements, but in the direction of its expansion, but in the direction of deepening of relations, increasing the generalization of holistic knowledge and skills. At the same time, any complex system can contain both structural systems and non-systematic connections. In this case, the level of integration achieved means a combination of integrity and a reduction in the number of such non-systematic connections.

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