

IMPROVING DUAL EDUCATION BY SOLVING THE PROBLEM OF SUBJECT INTEGRATION

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Annotatsion. This article deals with the content and improvement of higher education by solving the problem of integration and interdisciplinary communication of special subjects.

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Education is the social and spiritual support of human life, a means of ensuring democratic freedoms, a factor of national security. The content of higher education, according to the national program, is built in accordance with the achievements of culture, science and technology, the needs of the individual, society and the state.

The introduction of the integration of subjects in the education system allows us to solve the tasks currently set for the school and society as a whole. Integrated learning has a positive effect on the development of independence, cognitive activity and the interests of students. Its content, the teaching activities of the teacher are addressed to the student's personality, therefore they contribute to the all-round development of abilities, enhancing students' thinking processes, encouraging them to generalize knowledge from different sciences, the ability to acquire and develop skills, competencies that can be used or transformed to a variety of life situations.

The result of integrated learning is manifested in the development of students' creative thinking. It contributes not only to the intensification, systematization, and optimization of educational and cognitive activity, but also to the mastery of cultural literacy (linguistic, ethical, historical, philosophical). And the type of culture determines the type of human consciousness, so integration is extremely relevant and necessary in modern education.

Integration is a leading trend in the development of scientific knowledge in modern conditions. It manifests itself in the synthesis of knowledge, increasing the effectiveness of scientific research. Integration and differentiation are the natural processes of the development of science. These two processes correspond to two tendencies of human cognition, on the one hand, to represent the world as a whole, on the other hand, to comprehend deeper and more concretely the patterns and qualitative originality of various structures and systems.

Integration in modern education goes in several directions and at different levels:

intra-subject - integration of concepts, knowledge, skills, etc. within individual subjects;

interdisciplinary - synthesis of facts, concepts, principles, etc. two or more disciplines;

trans-object - synthesis of the components of the main and additional educational content.

The foundation of education and its most important element is the learning process, specially created to achieve the specified goals. The quality of education as a whole ultimately depends

on its quality. This quality, i.e. pedagogical efficiency and effectiveness of the learning process depends on its integrity as a system, the integration of its components. With regard to the learning process, integrity is its scientific and pedagogical validity and ability through interdisciplinary integration to provide holistic fundamental education in all disciplines.

The implementation of interdisciplinary integration, i.e. the construction of integral models of the studied phenomena would allow: to create conditions for the conscious understanding by the students of these phenomena and to facilitate the solution of cognitive and professional tasks; on the basis of the previous to promote the integration of education; promote the harmonious development of personality.

Thus, the solution of the designated tasks is closely related to the problem of integration. There are various approaches to its definition. Let's analyze the most significant of them. The most general concept of integration is defined as the connection between phenomena in the process of development in nature, society and cognition, when the new, replacing the old, retains some of its elements.

Integration presupposes a necessary element of the connection of past, present and future, which allows us to dialectically combine the old with the new, replace one form with another, more perfect, find new forms and create prerequisites for their successful development.

Integration is an objective regularity of the development of nature and society. Without integration, it is impossible to move forward in all areas of human activity, because “the new does not arise from scratch, is not formed from nothing. It has deep roots in the past stage of development, is generated by the past, grows out of the past, like a tree from a seed, and, in turn, contains the germ of the future”.

Thus, integration in philosophy is viewed as a pattern of development. Moreover, integration is a manifestation of such basic laws of dialectics as the law of negation of negation, the law of transition of quantitative changes into qualitative, the law of unity and the struggle of opposites.

The role of integration in vocational training, ensuring the integrity of the pedagogical process. Thus, the creation of educational areas can be interpreted as the process of combining (integrating) academic disciplines regarding research and solving various types of tasks. Dual education as a long stage of secondary specialized education contributes to the achievement of the overall goal of the university, ensuring students learn the basics of academic disciplines, develop their thinking and creative abilities, developing a scientific worldview.

The concept of higher education at a university defines educational goals as:

- the formation of a comprehensively developed personality;
- the study of the main components of the professional picture of the world;
- mastering the basic ideas about the scientific method of research and its place in the system of knowledge of the world;
- the formation and development of cognitive abilities.

Note some aspects of the modern concept of higher education. It assumes the level and profile differentiation as the most consistent with the ideas of student-centered education,

modern ideas of world pedagogy and psychology, which require a harmonious combination in teaching the interests of the individual and society. Strengthening the applied orientation of courses of special disciplines at all stages of training should ensure the formation of skills for graduates to apply the achievements of science in their practical activities. For the successful reform of higher education institutions, a set of measures is needed based on scientific and pedagogical methods. With their help, it is possible to ensure that each special discipline studied by students makes a fundamental contribution to their general higher education. This requires appropriate actions on the part of administrative and methodological bodies of the educational institution, as well as of the state and society as a whole.

Fundamental education should be holistic, for which individual disciplines should be viewed not as a set of traditional autonomous courses, but as single integrated cycles of fundamental disciplines interconnected by a common objective function, ensuring the integrity of education as such.

The current state of the special disciplines does not yet fully meet the criteria set forth. Significant and concerted efforts by teachers from the entire cycle of special disciplines are required in order for the fundamentals in this area to become a reality.

Integration of special education undergraduate and graduate education in higher education should be ensured by the unity of purpose, content, methods and means. The goals of special subjects of higher education are deepened and concretized. In particular, these include: the ability to use the knowledge gained in practical work; the formation of professional skills; development of qualities promoting readiness for the improvement and continuation of education.

The focus of the educational process on the formation of the personality of the student involves the creation of conditions for the development of thinking, memory, attention and will. This goal should be achieved in the whole educational process, including in the process of teaching special subjects in higher education.

The goals of special education largely determine its content. In accordance with the law, the content of education should ensure the formation of a natural science picture of the world in students, corresponding to the modern level of knowledge and level of education. This shows the unity of the content of education in higher education.

Achieving the goals of higher education is realized by adequate teaching methods, corresponding to the ideology of developmental education, the methodology of an active approach, student-centered pedagogy, which transform education into the sphere of the personality formation of students, their mastery of ways of thinking and various activities. Of particular importance in vocational education is the mastery of the scientific method, which involves the use of methods of educational experiment, research, problem, a variety of active teaching methods. To fulfill the curriculum and educational material, an important role in the organization of the educational process is played by technology and teaching methods. When studying a particular subject, the interdisciplinary connection of general education, general professional and special disciplines, as well as the methods and techniques of the lesson, didactic material, methodological security relating to the subject being studied, are very important.

Based on all the above, it can be concluded that based on the method of studying interdisciplinary integration in the study of a particular topic, based on the degree of knowledge gained, the material under study can be explained more accessible and

understandable. In this case, the assimilation of the material passes easily and quickly. Since integration is not an end in itself, but a certain system in the activity of a teacher, there must be an end result of integrated learning:

to increase the level of students' knowledge of the subject, which manifests itself in the depth of digestible concepts, patterns due to their multifaceted interpretation using information from integrable sciences;

in changing the level of intellectual activity provided by the consideration of educational material from the perspective of leading ideas, the establishment of natural relationships between the problems studied;

- in the emotional development of students, based on the attraction of music, painting, modeling, literature, etc .;
- in the growth of the cognitive interest of students, manifested in the desire for active and independent work in the classroom and during extracurricular time;
- in the inclusion of students in creative activities, the result of which can be their own poems, drawings, panels, crafts, which are a reflection of the personal attitude to certain phenomena and processes.

The highlighted aspects correspond to the educational, developmental and educational functions of training. This allows us to formulate the conclusion that the integration of objects contributes to the overall development of the child and a deeper study of topics in the classroom, contributes to the formation of a holistic picture of the world in children, understanding the links between phenomena in nature, society and the world as a whole.

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